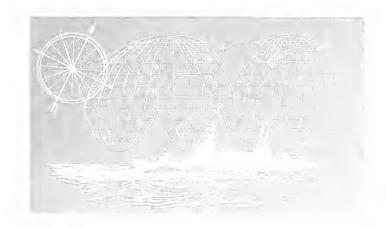
U.S. Coast Goard Oreaucgraphic Report

OCEANOGRAFILE REPORT IN SE

014 373-52

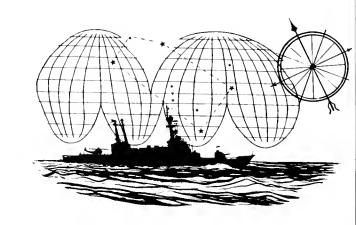
OCEANOGRAPHIC SSERVATIONS

NORTH ATLANTIC STANDARD COURT ATLANTIC STANDARD COU



GC 3 .U7 A3 nu 32 Atlas 532-AA CG-373-32 shelf

UNITED STATES COAST GUARD OCEANOGRAPHIC



UNITED STATES COAST GUARD OCEANOGRAPHIC UNIT

REPORT No. 32 CG 373-32

OCEANOGRAPHIC OBSERVATIONS

NORTH ATLANTIC STANDARD MONITORING SECTI
1964-1966

David M. Husby



WASHINGTON, D.C. S OCTOBER 1969



DEDICATION

This report, the first on the Coast Guard's Standard Section Monitoring Program, is dedicated to James W. McGary, Director of Oceanography of the Coast Guard Oceanographic Unit from 1964 until his death in September 1968. Born in Mercer County, Pa., he received a bachelor's degree in education in 1939 from Pennsylvania State Teachers College in Slippery Rock, Pa.; a bachelor's degree in engineering from the U.S. Coast Guard Academy in 1942, and a master's degree in physical oceanography from Johns Hopkins University in 1952. In World War II, he served with the Coast Guard in the Atlantic and Pacific theaters. He remained in the Coast Guard Reserve, attaining the rank of Commander. After the war, he taught school until becoming an oceanographer at the Honolulu Biological Laboratory of the U.S. Fish and Wildlife Service and then was employed by the Office of Naval Research prior to appointment as the first Director of the Coast Guard Oceanographic Unit.

Jim McGary created the Coast Guard's Standard Section Monitoring Program. This program was initiated and developed under his guidance and must rank as one of his most important contributions in the field of oceanography. In his memory, the Standard Section Monitoring Program will continue to make best use of Coast Guard cutters en route to and from ocean stations by collecting vast amounts of oceanographic data that will immeasurably add to knowledge about our major current systems in the North Atlantic and North Pacific Oceans.

ABSTRACT

This report contains the observed and interpolated oceanographic data obtained by U.S. Coast Guard vessels on six Standard Monitoring Sections in the North Atlantic during 1964 through 1966. The Standard Section Monitoring Program was initiated by the U.S. Coast Guard in 1964 to provide for the systematic collection, compilation, and presentation of oceanographic data in the major current systems of the North Atlantic. A discussion of the data collection methods, data treatment, and a tabulation of the data along with vertical sections of temperature, salinity, and solenoidal volume flow are presented in this report.

CONTENTS

D 1' /'
Dedication
AbstractIntroduction
Data collection.
Data treatment
Cruise narratives
Data presentation
Literature cited
Illustrations.
Tables
Explanation of oceanographic station data
Tables of oceanographic data
•
ILLUSTRATIONS
Figure
1. Positions of North Atlantic Standard Monitoring Sections
2. Trackline of Gulf Stream-Labrador Current Survey, USCGC EVERGREEN
(WAGO 295), 17 October-17 November 1966
3. Surface Dynamic Height Contours, Relative to 1,000 Decibar Surface, on
Sections A2, A3, and A4, 6–13 November 1966
4. Surface Dynamic Height Contours, Relative to 1,000 Decibar Surface, on
Sections A5 and A6, 25 October-3 November 1966
5. Vertical Section of Temperature (°C) on Section A1, USCGC EVERGREEN,
25 July-26 July 1965
6. Vertical Section of Salinity (°/oo) on Section A1, USCGC EVERGREEN,
25 July-26 July 1965
7. Solenoid Division of Section A1, as used in Volume Flow, Heat and Salt
Transport Calculations. Prepared from Data of USCGC EVERGREEN,
25 July-26 July 1965
8. Vertical section of Temperature (°C) on Section A1, USCGC EVERGREEN,
6 June-7 June 1966
6 June-7 June 1966
10. Solenoid Division of Section A1, as used in Volume Flow, Heat and Salt
Transport Calculations. Prepared from data of USCGC EVERGREEN,
6 June-7 June 1966
11. Vertical Section of Temperature (°C) on Section A2, USCGC HUMBOLDT,
(WHEC 372), 11 March-12 March 1966
12. Vertical Section of Salinity (°/oo) on Section A2, USCGC HUMBOLDT,
11 March -12 March 1966

Fig	ure	Pε
13.	Solenoid Division of Section A2, as used in Volume Flow, Heat and Salt Transport Calculations. Prepared from Data of USCGC HUMBOLDT,	
	11 March-12 March 1966.	
	Vertical Section of Temperature (°C) on Section A2, USCGC EVERGREEN,	
	7 April-8 April 1966 Vertical Section of Salinity (°/oo) on Section A2, USCGC EVERGREEN,	
15.		
	7 April-8 April 1966	
16.	Solenoid Division of Section A2, as used in Volume Flow, Heat and Salt Transport Calculations. Prepared from Data of USCGC EVERGREEN, 7 April-8 April 1966	
17.	Vertical Section of Temperature (°C) on Section A2, USCGC EVERGREEN, 26 May-27 May 1966	
18.	Vertical Section of Salinity (°/oo) on Section A2, USCGC EVERGREEN, 26 May-27 May 1966	
19.	Solenoid Division of Section A2, as used in Volume Flow, Heat and Salt Transport Calculations. Prepared from Data of USCGC EVERGREEN, 26 May-27 May 1966	
20.	Vertical Section of Temperature (°C) on Section A2, USCGC EVERGREEN, 6 November-7 November 1966	
21.	Vertical Section of Salinity (°/oo) on Section A2, USCGC EVERGREEN, 6 November-7 November 1966.	
22	Solenoid Division of Section A2, as used in Volume Flow, Heat and Salt	
	Transport Calculations. Prepared from Data of USCGC EVERGREEN,	
	6 November – 7 November 1966	
23.	Vertical Section of Temperature (°C) on Section A3, USCGC MENDOTA (WHEC 69), 23 November-24 November 1964.	
24	Vertical Section of Salinity (°/00) on Section A3, USCGC MENDOTA,	
	23 November-24 November 1964	
<i>2</i> 3.	Solenoid Division of Section A3, as used in Volume Flow, Heat and Salt Transport Calculations. Prepared from Data of USCGC MENDOTA, 23 November-24 November 1964.	
26.	Vertical Section of Temperature (°C) on Section A3, USCGC INGHAM (WHEC 35), 28 January-29 January 1965.	
	Vertical Section of Salinity (°/oo) on Section A3, USCGC INGHAM, 28 January-29 January 1965	
	Solenoid Division of Section A3, as used in Volume Flow, Heat and Salt Transport Calculations. Prepared from Data of USCGC INGHAM, 28 January-29 January 1965	
29.	Vertical Section of Temperature (°C) on Section A3, USCGC DUANE (WHEC 33), 14 February-15 February 1966.	
	Vertical Section of Salinity (°/oo) on Section A3, USCGC DUANE, 14 Februáry-15 February 1966	
31.	Solenoid Division of Section A3, as used in Volume Flow, Heat and Salt Transport Calculations. Prepared from Data of USCGC DUANE, 14	
	February-15 February 1966	
32.	Vertical Section of Temperature (°C) on Section A3, USCGC HUMBOLDT, 9 March-10 March 1966.	
33	. Vertical Section of Salinity (°/oo) on Section A3, USCGC HUMBOLDT,	
	9 March-10 March 1966	

Fig	ure
34.	Solenoid Division of Section A3, as used in Volume Flow, Heat and Salt
	Transport Calculations. Prepared from Data of USCGC HUMBOLDT,
	9 March-10 March 1966
35.	Vertical Section of Temperature (°C) on Section A3, USCGC EVERGREEN,
	4 April–5 April 1966
36.	Vertical Section of Salinity (°/oo) on Section A3, USCGC EVERGREEN,
	4 April–5 April 1966
37.	Solenoid Division of Section A3, used in Volume Flow, Heat and Salt
	Transport Calculations. Prepared from Data of USCGC EVERGREEN,
	4 April-5 April 1966
38.	4 April-5 April 1966
	16 April–17 April 1966
39.	Vertical Section of Salinity (°/00) on Section A3, USCGC EVERGREEN,
	16 April-17 April 1966
40.	Solenoid Division of Section A3, as used in Volume Flow, Heat and Salt
	Transport Calculations. Prepared from Data of USCGC EVERGREEN,
	16 April–17 April 1966
41.	16 April-17 April 1966
	18 April–19 April 1966
42.	Vertical Section of Salinity (°/00) on Section A3, USCGC EVERGREEN,
	18 April–19 April 1966
43.	Solenoid Division of Section A3, as used in Volume Flow, Heat and Salt
-0.	Transport Calculations. Prepared from Data of USCGC EVERGREEN,
	18 April–19 April 1966
44.	Vertical Section of Temperature (°C) on Section A3, USCGC EVERGREEN.
	21 April 1966
45.	Vertical Section of Salinity (°/oo) on Section A3, USCGC EVERGREEN,
10.	21 April 1966
46.	Solenoid Division of Section A3, as used in Volume Flow, Heat and Salt
	Transport Calculations. Prepared from Data of USCGC EVERGREEN,
	21 April 1966
47.	21 April 1966 Vertical Section of Temperature (°C) on Section A3, USCGC EVERGREEN,
	25 May-26 May 1966
48.	Vertical Section of Salinity (°/00) on Section A3, USCGC EVERGREEN,
20.	25 May-26 May 1966
49.	Solenoid Division of Section A3, as used in Volume Flow, Heat and Salt
	Transport Calculations. Prepared from Data of USCGC EVERGREEN,
	25 May-26 May 1966
50	Vertical Section of Temperature (°C) on Section A3, USCGC EVERGREEN,
00.	9 November –11 November 1966.
51	Vertical Section of Salinity (°/00) on Section A3, USCGC EVERGREEN, 9
σ1.	AT 1 44 AT 1 4000
59	Solenoid Division of Section A3, as used in Volume Flow, Heat and Salt
υΔ.	Transport Calculations. Prepared from Data of USCGC EVERGREEN, 9
	November 11 November 1966
52	
თ.	Vertical Section of Temperature (°C) on Section A4, USCGC EVERGREEN,
54	2 April–3 April 1966 Vertical Section of Solinity (%/) on Section A4. USCCC EVER CREEN 2
94.	Vertical Section of Salinity (°/oo) on Section A4, USCGC EVERGREEN, 2
	April–3 April 1966

	Page
Figure 55. Solenoid Division of Section A4, as used in Volume Flow, Heat and Salt 55. Solenoid Division of Section A4, as used in Volume Flow, Heat and Salt	<u> </u>
Transport Calculations. Prepared from Data of USCGC EVERGREEN, 2 April-3 April 1966	43
56. Vertical Section of Temperature (°C) on Section A4, USCGC EVERGREEN,	44
57. Vertical Section of Salinity (°/00) on Section A4, USCGC EVERGREEN, 22	44
58. Solenoid Division of Section A4, as used in Volume Flow, Heat and Sattern Transport Calculations. Prepared from Data of USCGC EVERGREEN,	45
To It is a Continue of Temperature (°C) on Section A4, USCGC EVERGILEEN,	46
11 November 13 November 1966. 60. Vertical Section of Salinity (°/00) on Section A4, USCGC EVERGREEN, 11 November 13 November 1966.	46
61. Solenoid Division of Section A4, as used in Volume Flow, Heat and Salt Transport Calculations. Prepared from Data of USCGC EVERGREEN,	47
62. Vertical Section of Temperature (°C) on Section A5, USCGC EVERGREEN,	48
63. Vertical Section of Salinity (%)00) on Section A5, USCGC EVERGREEN,	48
64. Solenoid Division of Section A5, as used in Volume Flow, Heat and Said	
1 November -3 November 1966	50
66. Vertical Section of Salinity (°/00) on Section A6, USCGC EVERGREEN	50
67. Solenoid Division of Section A6, as used in Volume Flow, Heat and San Transport Calculations. Prepared from Data of USCGC EVERGREEN	, . 51
25 October -28 October 1966. 68. Vertical Section of Temperature (°C) on Section A6, USCGC ROCKAWAY (WAGO 377), 19 November -22 November 1966.	,
(WAGO 377), 19 November 22 November 13002233669. Vertical Section of Salinity (°/00) on Section A6, USCGC ROCKAWAY	, 52
19 November-22 November 1966 70. Solenoid Division of Section A6, as used in Volume Flow, Heat and Sal Transport Calculations. Prepared from Data of USCGC ROCKAWAY 19 November-22 November 1966	t ·
TABLES	
1004.00	Page 54
 Listing of all Standard Section Cruises, 1964-66. List of Standard Depths (meters) for Electronically Obtained Serial Data. 	_ 54
TABLES OF OCEANOGRAPHIC DATA	Page
 I. USCGC MENDOTA (WHEC 69) November 1964 Data and USCG-INGHAM (WHEC 35) January 1965 Data	67 75
III. USCGC HUMBOLDT (WHEC 372) March 1965 Data IV. USCGC EVERGREEN (WAGO 295) October-November 1966 Data V. USCGC ROCKAWAY (WAGO 377) November 1966 Data	

INTRODUCTION

In November 1964, the USCGC MENDOTA (WHEC 69) occupied a line of oceanographic stations from the eastern Grand Banks to the southeast across the main core of the Labrador Current. This was the beginning of the U.S. Coast Guard's "Standard Section" Monitoring Program in the North Atlantic. It has long been recognized that our knowledge of large-scale variations in oceanic circulation, e.g., eddy processes, is very limited. Large-scale problems such as this need a large volume of long-term observations for their solution. In fulfillment of this objective, the U.S. Coast Guard initiated a program to provide for the systematic collection, compilation, and presentation of oceanographic data in the major current systems of the western North Atlantic. Seven sections in the North Atlantic were selected to be monitored by U.S. Coast Guard ocean station vessels; the two oceanographic vessels, the USCGC EVER-GREEN (WAGO 295) and the USCGC ROCK-AWAY (WAGO 377); and icebreakers on an opportunity basis.

The sections were selected to include the most dynamic areas possible and still be somewhat consistent with the normal tracks of the ocean station vessels (fig. 1). In most cases, the sections are normal to and include the main axis of a major current. Sections 1, 2, and 3 extend across the main core of the Labrador Current and occupation of these sections will result in a valuable input for the long-range forecasting of ice conditions on the Grand Banks. During the months of April, May, and June, the USCGC EVERGREEN occupies these sections in direct support of international Ice Patrol research. In fact, section 1 has been occupied nearly annually since 1928 as part of a larger section extending from near South Wolf Island, Labrador, to Cape Farewell, Greenland (Bush, et al., 1957).

Section 4 extends from the southern Grand Banks southward across the Labrador Current, across the mixed waters of the Labrador Current and into the North Atlantic Current. Data from this section could indicate the boundaries of these currents and their relative strengths in the dynamic area where the Arctic waters of the Labrador meet the subtropical waters of the Gulf Stream.

Sections 5, 6, and 7 encompass the region from Cape Kennedy to the Gulf of Maine and between the continental shelf and the deep offshore waters. Data from these sections will provide information in the study of the Florida Current, Gulf Stream and North Atlantic Current systems.

The utilization of the ocean station vessels which routinely collect oceanographic data at four locations in the North Atlantic, allows a nearly synoptic observational program of the Labrador and North Atlantic Current systems. The ultimate goal is a monthly occupation of sections 2 through 5, seasonal occupation of sections 6 and 7, and occupation of section 1 as ice conditions permit. This sampling program was severely curtailed in 1965 by the shortage of deep-sea reversing thermometers.

DATA COLLECTION

A total of 32 ocean station vessels and the two U.S. Coast Guard Oceanographic vessels, USCGC EVERGREEN and USCGC ROCKAWAY, are equipped to participate in the Standard Section Program, The OSV's occupy a section en route from a particular ocean station, as scheduling permits. Each vessel has at least a minimum of the equipment necessary to conduct Nansen bottle casts, make salinity determinations and collect bathymetric and meteorological data. The vessels are now being equipped with the in situ Salinity/ Temperature/Depth Sensor Systems (STD). Observations are made by trained oceanographic technicians who are graduates of the U.S. Coast Gnard Training Center's Oceanography School, formerly at Groton, Connecticut.

The USCGC EVERGREEN was equipped with the STD system in 1966 and made the first successful use of the STD system on the Standard Sections on the Gulf Stream-Labrador Current Survey during October-November 1966, which will be discussed later.

STATION OBSERVATIONS

- 1. At the majority of the stations, the maximum sampling depth is 1,500 meters or as near the bottom as is practicable if the water depth is less than 1,500 meters. In the offshore areas sampling is extended to as close to the bottom as possible at 180 to 200 mile intervals. For the 1,500 meter casts, the sampling depths, in general, are 0, 25, 50, 100, 150, 200, 300, 400, 500, 600, 800, 1000, 1250 and 1,500 meters. Water temperature and salinity are measured at each sampling depth.
- 2. Temperatures are measured by deep-sea reversing thermometers of the Richter and Wiese, Yoshino Keike, and Kessler makes. Two protected

thermometers are used on each Nansen bottle. At least five bottles from 200 to 1,500 meters have an unprotected thermometer in conjunction with the protected thermometers for the thermometric determination of sampling depths. In situ temperatures are determined by the average of the corrected readings of the protected thermometers. The maximum difference tolerated between the two readings is ± 0.040 °C.

3. Samples of water are drawn from each Nansen bottle for the determination of salinity aboard ship. Duplicate samples are drawn from the top and bottom Nansen bottle in each cast and delivered to the U.S. Coast Guard Oceanographic Unit for quality control comparisons. The salinities are determined aboard ship by Model 6220 inductive salinometers manufactured by the Bisset-Berman Corp. These instruments have a probable accuracy, as stated by the manufacturer, of $\pm 0.003\%$.

DATA TREATMENT

The data for each station, including temperature, salinity, and depth, are encoded and transmitted to U.S. Coast Guard Oceanographic Unit, Washington, D.C., via radio teletype for real-time data processing and quality control. The temperature data are transmitted immediately after the observations are made while the salinities are usually transmitted within 3 days of observation. The U.S. Coast Guard Oceanographic Unit processes these data with a Digital Equipment Corp. PDP-5 computer. Nansen cast temperatures are corrected at U.S. Coast Guard Oceanographic Unit and transmitted to the Fleet Numerical Weather Facility, Monterey, California, within 12 hours of observation for use in forecasting oceanographic conditions.

Values of density (σ_{\dagger}) and dynamic heights based on the 1,000 decibar level are determined at each sample depth. The U.S. Coast Guard Oceanographic Unit computes the dynamic heights of the various levels, summing both the observed specific volume anomaly values and the interpolated standard depth values. The determination of dynamic heights in shallow water is performed in the manner described by Helland-Hansen (1934). This method assumes that level isoteric surfaces extend from the water-sediment interface, on the continental slope, into the bottom to a point directly below the next station. This allows the extension of the pressure surfaces,

related to the 1,000 decibar level of no assumed motion, above the shelf as far as the Coast.

Volume flow computations are accomplished at U.S. Coast Guard Oceanographic Unit by a computer program specifically written to provide transport information through vertical property sections (Kollmeyer, et al., 1966). The program computes volume flow information through solenoids which subdivide a property section into small rectangles. The solenoids are bounded by the data obtained from adjacent stations at the various standard depths. The volume flow information is calculated using the following equations:

$$\overline{V} = V_m \times A$$
 (1)

where

$$V_{m} = \frac{10(\overline{D}_{A} - \overline{D}_{B})}{fL} \tag{2}$$

$$A = d \times L \tag{3}$$

 \overline{V} = volume flow

 V_m =mean water velocity within the solenoid

A=Area of solenoid, bounded by station locations and standard depth intervals

 $(\overline{D}_A - \overline{D}_B) = \text{Difference}$ in mean dynamic height values between adjacent stations, based on the 1,000 decibar level, at a point between the upper and lower standard depth values bounding the solenoid.

 $f = \text{Coriolis parameter} = 2\Omega$

sin φ

where Ω = angular velocity of earth

 $\phi = latitude$

L=Distance between adjacent stations

d=Vertical distance between the standard depth values bounding the solenoid.

Combining equations (1), (2), and (3);

$$\overline{V} = \frac{10(\overline{D}_{A} - \overline{D}_{B})d}{f} \tag{4}$$

The volume flow calculations are now independent of the distance between stations. This allows simplified volume flow computations through solenoids located along the bottom in shallow water. The volume flow computed has the dimensions 10⁶ m³/sec and the direction of flow is indicated by a plus or minus sign. Thus, each vertical property section is divided into solenoids and the entire volume flow, magnitude, and direction, through the section is determined.

Property transport of heat and salt are computed for each solenoid in the section using the following equations:

$$Q_{t} = \overline{V} \times T_{m} \tag{5}$$

where

 Q_{\dagger} = heat transport (10⁶°C. m^3/sec) T_m = mean temperature within solenoid
(°C) \overline{V} = volume flow (10⁶ m^3 /sec)

and

$$M_s = \overline{V} \times S_m \times \rho_m \tag{6}$$

where

 M_s =salt transport (10°) gms/sec S_m =mean salinity within solenoid ρ_m =mean density of seawater=1.03 gms/cm³

The processed temperature and salinity data were recorded on form NHO-NODC-31/67/1 (9-61), Physical and Chemical Data forms for Oceanographic Stations, and delivered to the National Oceanographic Data Center (NODC). The interpolated temperatures and salinities for standard depths, sigma-t, specific volume anomalies, geopotential anomalies (Δ D), and sound velocities were made by NODC and NODC provided listings for the preparation of tables (I-V).

CRUISE NARRATIVES

During the 1964-66 period, a total of 22 whole or in part occupations were made on six of the Standard Sections. The cruise number, ships, dates, numbers of stations and NODC accession numbers for these cruises are given in table 1. Section 7 was not occupied during this period, but has been included in the program in 1967.

Five of these cruises were made by ocean station vessels returning from Ocean Stations BRAVO and CHARLIE. The data were obtained on these cruises entirely by Nansen bottle casts. The remainder of the cruises were made by the U.S. Coast Guard Oceanographic Vessels, the USCGC EVERGREEN and USCGC ROCKAWAY.

Cruise A1-1 by the USCGC EVERGREEN was part of an oceanographic survey in the western Labrador Sea in the vicinity of Hudson Strait in 1965. The purpose of the survey was to quantitatively determine the contribution to and the effect of the Hudson Strait outflow on the Labrador Current. The data are published in the U.S. Coast Guard Oceanographic Report No. 12, "Oceanography of the Labrador Sea in the Vicinity of Hudson Strait in 1965," Kollmeyer, et al., 1967.

Cruises A3–1 and A3–2 were accomplished by the USCGC MENDOTA and the USCGC ING-HAM en route to and on the return voyage from Ocean Station CHARLIE, respectively. The data from both these cruises are listed by NODC as Ref. No. 31–223 and as table I of this report.

Cruises A1-2, A2-2, A3-5 through A3-9, A4-1, and A4-2 were made by the USCGC EVER-GREEN in support of International Ice Patrol research. They were made during the ice season of 1966 and consisted of a quasi-synoptic occupation of sections 2, 3, and 4 between 2 April and 8 April 1966 and then a time-series study of section 3 between 16 April and 21 April of three nearly complete occupations. During May-June 1966, the USCGC EVERGREEN then reoccupied sections 1, 2, 3, and 4 to investigate the temporal variations in the circulation of the Labrador Current. Cruises A2-1, A3-3, and A3-4 were made by the ocean station vessels USCGC HUMBOLDT (WHEC 372) and USCGC DUANE (WHEC 33) prior to the beginning of the Ice Patrol research, but the data were presented in graphical form with the 1966 Ice Patrol data. Cruise A3-3 by the USCGC DUANE was accomplished en route Ocean Station BRAVO in February 1966. The data are listed by NODC as Ref. No. 31-792 and as table II of this report. The data from cruises A2-1 and A3-4 were collected by the USCGC HUMBOLDT also en route to Ocean Station BRAVO in March 1966. The data are listed by NODC as Ref. No. 31-702 and as table III of this report. All these data are published in the U.S. Coast Guard Oceanographic Report No. 13, "Oceanography of the Grand Banks Region and the Labrador Sea in 1966," Wolford, T. C. (in press).

GULF STREAM-LABRADOR CURRENT SURVEY

During 17 October-17 November 1966, the USCGC EVERGREEN occupied sections A2, A3,

A4, A5, and A6 to provide a synoptic picture of the Gulf Stream and Labrador Current systems. Senior scientist for the cruise was Mr. J. W. McGary, Director of Oceanography, U.S. Coast Guard Oceanographic Unit, The objectives of this survey were: (1) to make a preliminary survey of sections A5 and A6 to check the adequacy of the station spacing and the sampling intervals and (2) to provide data on the Labrador-Gulf Stream system for the first time in the fall season. The trackline for the survey is shown in figure 2. Stations 1-19 in the Gulf of Maine were stations requested by the Bureau of Commercial Fisheries. The remainder of the survey is listed in table 1 as A2-4, A3-10, A4-3, A5-1, and A6-1.

A total of 107 stations were occupied using the Hytech 9006 in situ Salinity/Temperature/Depth Sensor System (STD) to obtain continuous temperature and salinity versus depth profiles from the surface to 1,500 meters. Sections A6 and A5 were occupied first between 25 October and 3 November 1966. Then sections 2, 3, and 4 were occupied, in that order. At three stations on A5 and two on A6, Nansen bottle casts were made in addition to the STD lowering to obtain data below the depth of 1,500 meters. However, these casts were limited to 3,000 meters by the amount of wire available. At all stations, one or two bucket temperatures and salinity samples were taken as quality control checks on the STD performance. Up to station 30, Nansen bottles were placed on the STD cable at the surface and 1,495 meters to collect calibration data. Results showed that temperature and depth corrections were negligible, but the STD salinity values were slightly lower than the control samples.

The analog traces of temperature and salinity which were obtained were read by recording only "standard" depth values and significant inflection point values. The standard depths are in accordance with those recommended by the NODC in publication M-2, "Processing Physical and Chemical Data from Oceanographic Stations," Part 1A, Coding and Keypunching Electronically Obtained Serial Data (Provisional), May 1966 (see table 2).

The processed and corrected data were tabulated on the NODC-EXP-3167/40 (4/66) Form for Reporting Electronically Obtained Serial Data (Provisional) and delivered to the NODC for archiving and the preparation of listings. The data are listed by the NODC as Ref. No. 31-8007 and as table IV of this report.

The USCGC ROCKAWAY occupied section A6 during the period 19 November-22 November 1966. Fifteen oceanographic stations were occupied, each consisting of 15-bottle Nansen casts to a depth of 1,500 meters or to within 50 meters of the bottom when the water depth was less than 1,500 meters. These data are listed by the NODC as Ref. No. 31-1061 and as table V of this report.

DATA PRESENTATION

The oceanographic station data for each cruise are presented in this report as vertical crosssections of temperature, salinity, and solenoidal volume flow.

For the Gulf Stream-Labrador Survey in November 1966, the dynamic topography of the sea surface relative to the 1,000 decibar surface is presented for each section by contouring the lines of dynamic height between each station with a contour interval of 0.02 dynamic meters (see figs. 3 and 4). The lines of equal dynamic height are not connected between each section, as has been the practice in the past, because it is realized that these data are not synoptic in any sense of the word.

All physical data are tabulated in tables I-V which are preceded by an explanation of the codes used.

Literature Cited

Bush, A. J., J. E. Murray, and F. M. Soule, 1957. International Ice Observation and Ice Patrol Service in the North Atlantic Ocean, Season of 1956, Bulletin No. 42. Helland-Hansen, B., 1934. The Sognefjord Section. Oceanographic Observations in the Northernmost Part of the North Sea and Southern Part of the Norwegian Sea. J. Johnstone Mem. Vol. p. 257, Liverpool, 1934.

Kollmeyer, R. C. et al., 1966. "Oceanography of the Labrador Sea in the Vicinity of Hudson Strait in 1965," U.S. Coast Guard Oceanographic Report No. 12, CG-373-12. NODC publication M-2, "Processing Physical and Chemical Data From Oceanographic Stations," Part 1A,

Coding and Keypunching Electronically Obtained Serial Data (Provisional), May 1966.

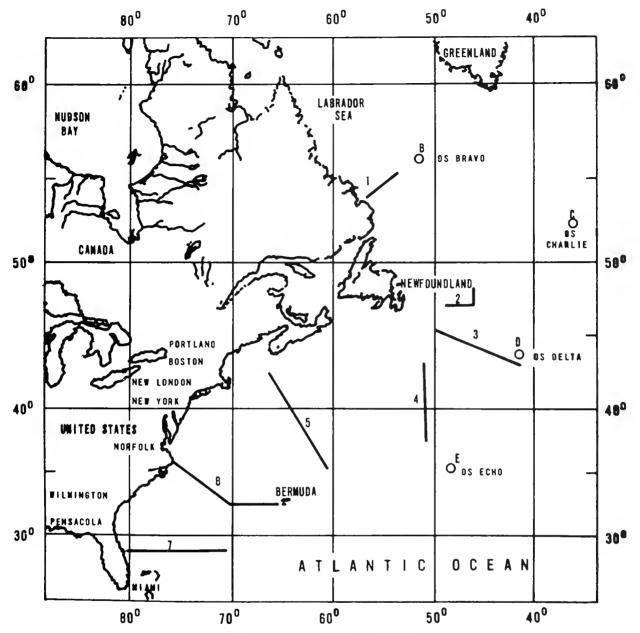


FIGURE 1. Locations of North Atlantic Ocean Stations and Standard Monitoring Sections occupied by the U.S. Coast Guard.

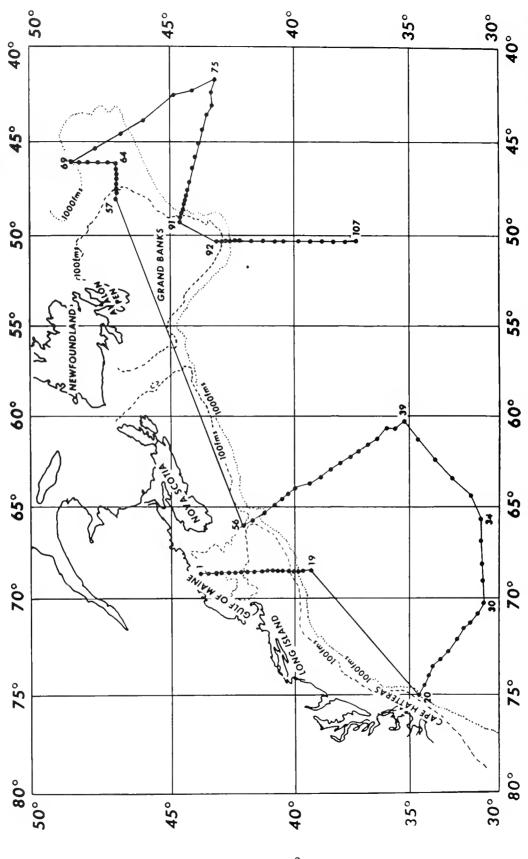


Figure 2. Trackline of Gulf Stream-Labrador Current Survey of the USCGC EVERGREEN, 17 October-17 November 1966. Numbers indicate consecutive station numbers. Stations 1-19 were occupied at the request of the Bureau of Commercial Fisheries Biological Laboratory, Woods Hole, Mass. The data for stations 1-19 are not included in this report.

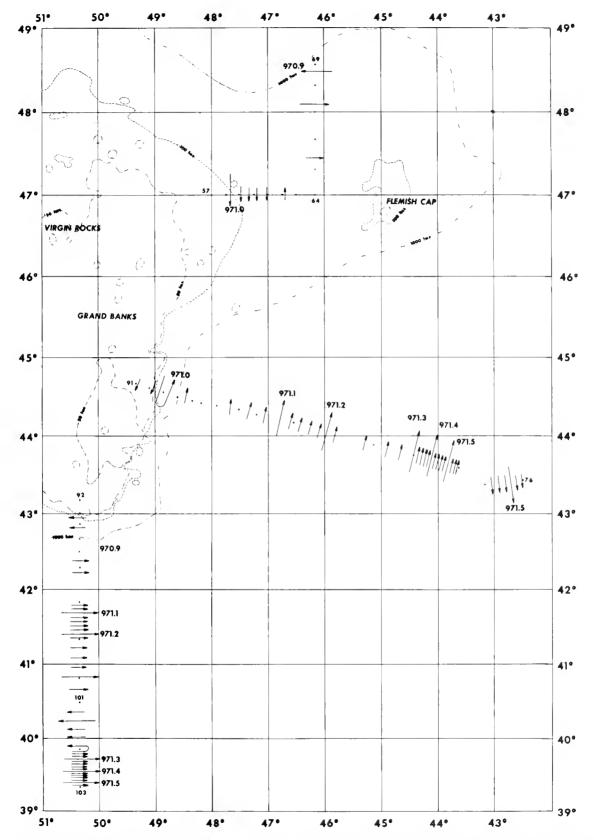


Figure 3. Isopleths of surface dynamic height relative to 1,000 decibar surface on North Atlantic Standard Monitoring Sections A2, A3, and A4, 6–13 November 1966, from data of USCGC EVERGREEN. Contour interval is 0.02 dynamic meter. Dots indicate station locations.

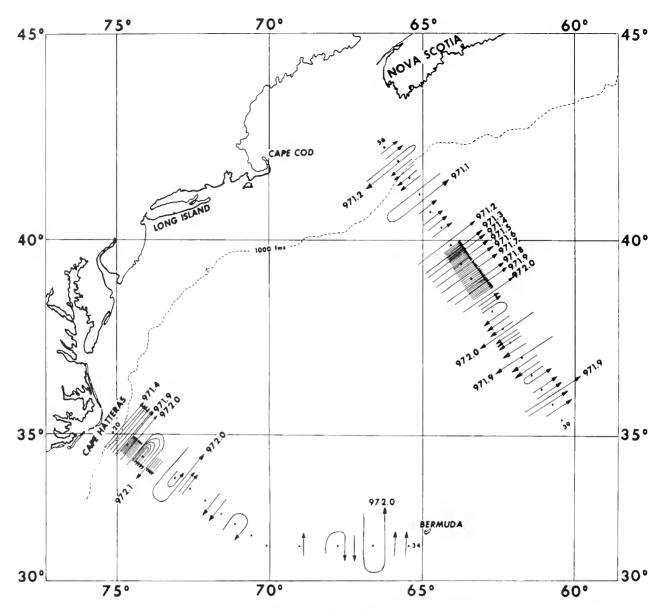


FIGURE 4. Isopleths of surface dynamic height relative to 1,000 decibar surface on North Atlantic Standard Monitoring Sections A5 and A6, 25 October-3 November 1966, from data of USCGC EVERGREEN. Contour interval is 0.02 dynamic meter. Dots indicate station locations.

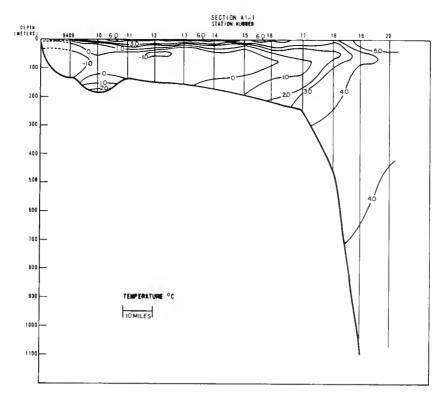


Figure 5. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A1 on 25–26 July 1965, prepared from data of USCGC EVERGREEN.

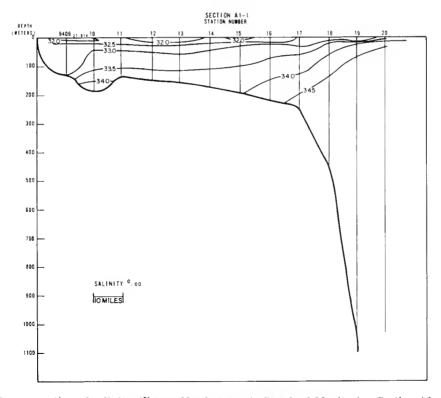


Figure 6. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A1 on 25-26 July 1965, prepared from data of USCGC EVERGREEN.

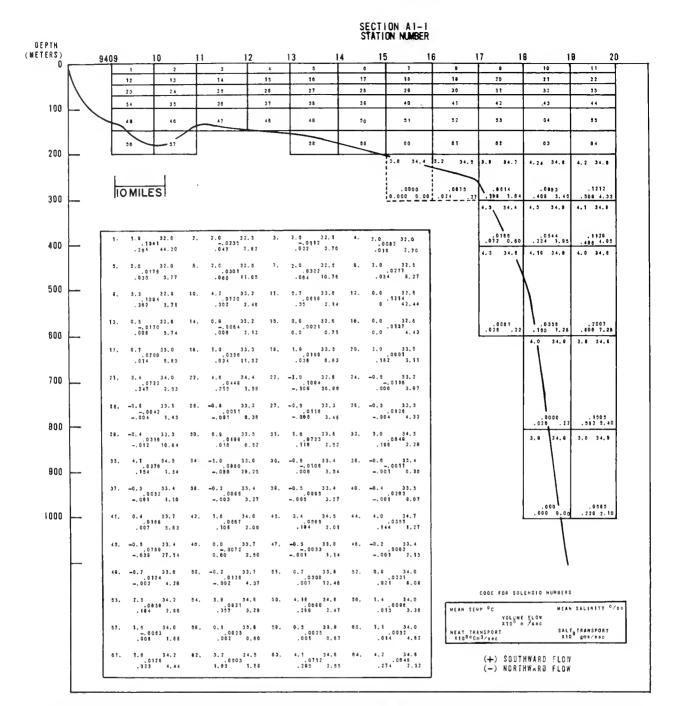


Figure 7. Solenoid division of North Atlantic Standard Monitoring Section A1 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 25-26 July 1965.

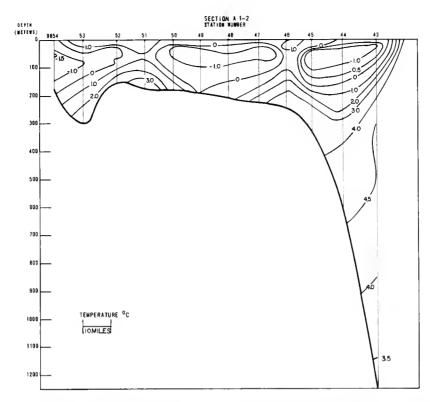


FIGURE 8. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A1 on 6-7 June 1966. Prepared from data of USCGC EVERGREEN.

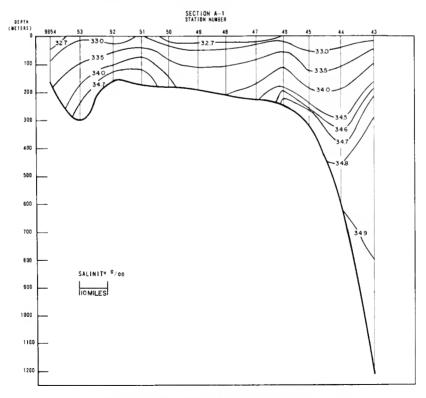


FIGURE 9. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A1 on 6-7 June 1966, prepared from data of USCGC EVERGREEN.

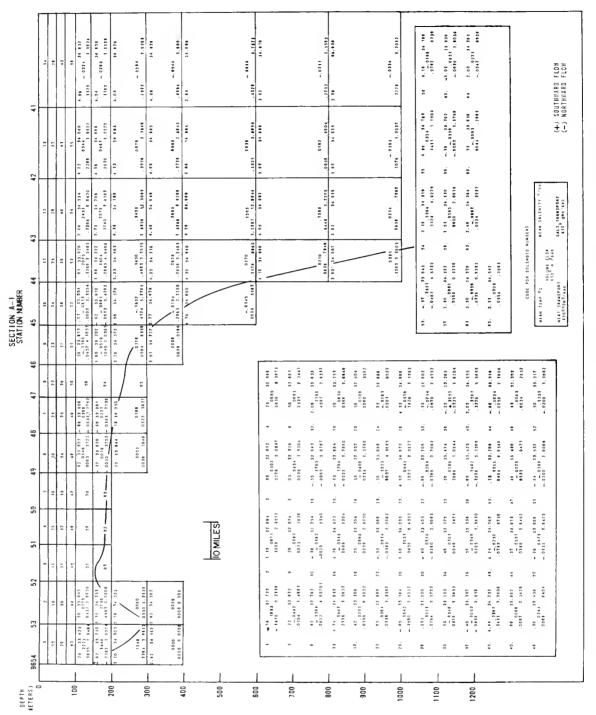


FIGURE 10. Solenoid division of North Atlantic Standard Monitoring Section A1 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 6-7 June 1966.

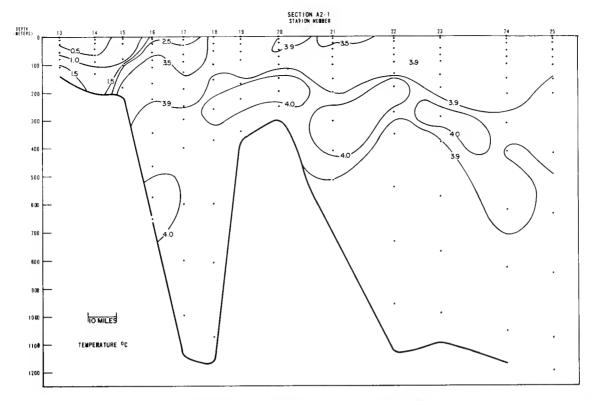


Figure 11. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A2 on 11–12 March 1966, prepared from data of USCGC HUMBOLDT.

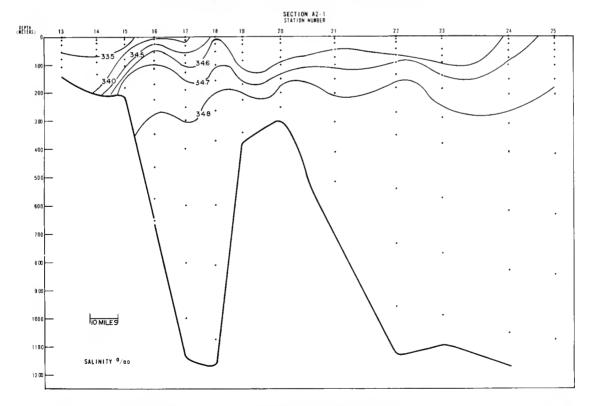


Figure 12. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A2 on 11–12 March 1966. prepared from data of USCGC HUMBOLDT.

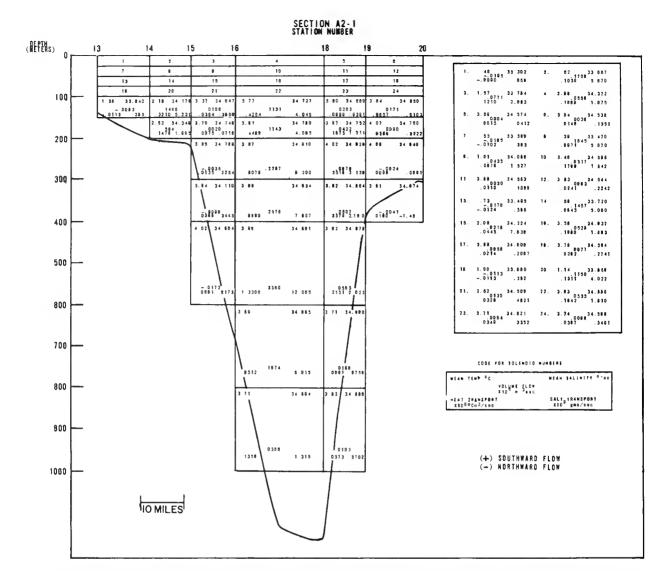


Figure 13. Solenoid division of North Atlantic Standard Monitoring Section A2 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC HUMBOLDT, 11–12 March 1966.

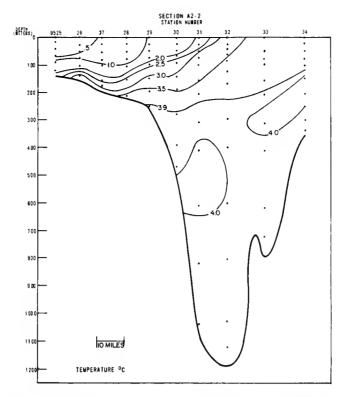


Figure 14. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A2 on 7–8 April 1966, prepared from data of USCGC EVERGREEN.

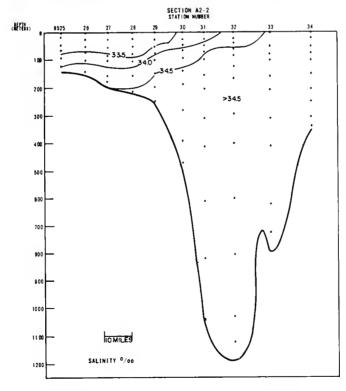


Figure 15. Verticle cross section of salinity (%) on North Atlantic Standard Monitoring Section A2 on 7–8 April 1966, prepared from data of USCGC EVERGREEN.

SECTION A2-2 STATION NUMBER

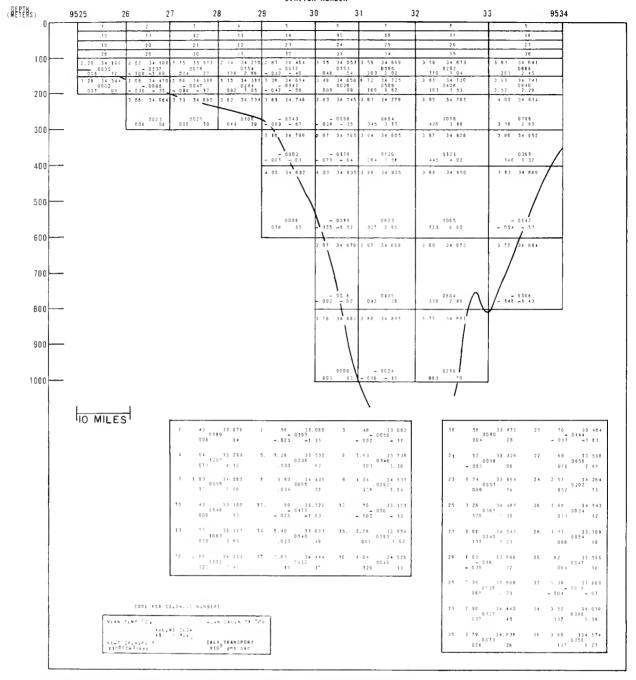
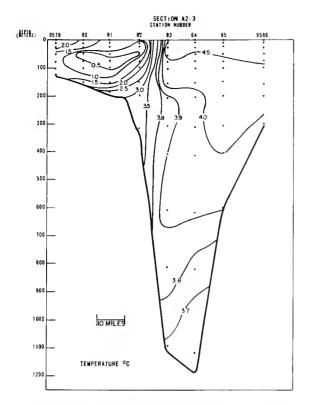
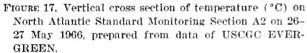


FIGURE 16. Solenoid division of North Atlantic Standard Monitoring Section A2 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 7-8 April 1966.





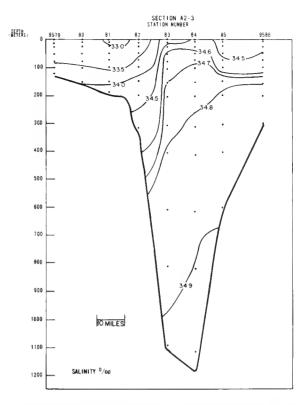


Figure 18. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A2 on 26-27 May 1966, prepared from data of USCGC EVERGREEN.

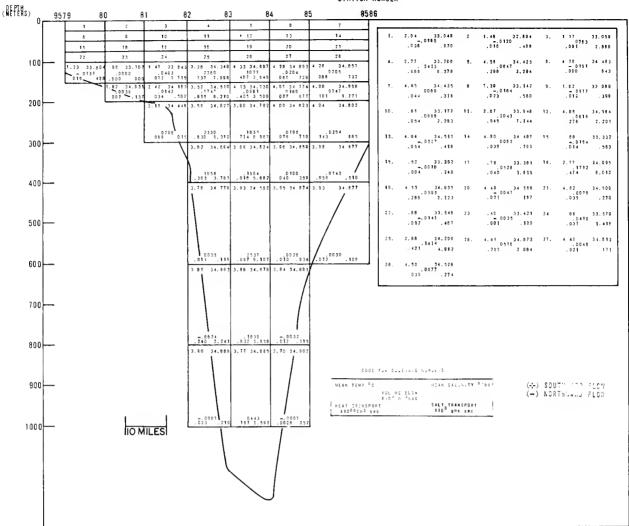


FIGURE 19. Solenoid division of North Atlantic Standard Monitoring Section A2 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 26-27 May 1966.

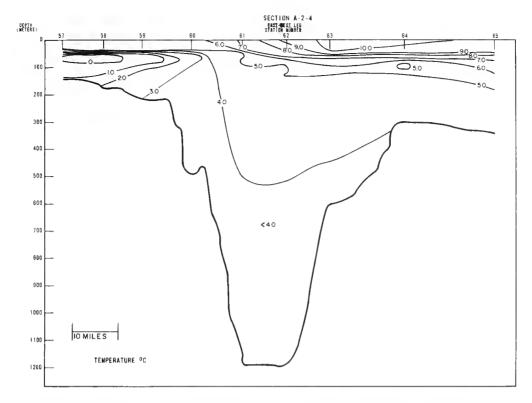


FIGURE 20(a). Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A2 on 6-7 November 1966, prepared from data of USCGC EVERGREEN. This cross section contains only the east to west portion of the section.

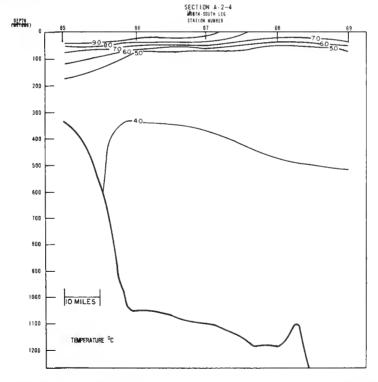


Figure 20(b). Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A2 on 6-7 November 1966, prepared from data of USCGC EVERGREEN. This cross section contains only the north to south portion of the section.

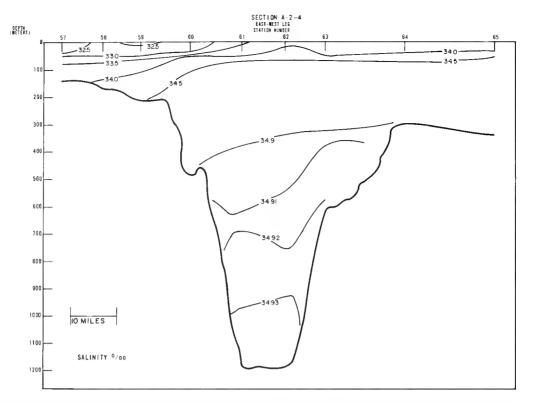


FIGURE 21(a). Vertical cross section salinity (%) on North Atlantic Standard Monitoring Section A2 on 6-7 November 1966, prepared from data of USCGC EVERGREEN. This cross section contains only the east to west portion of the section.

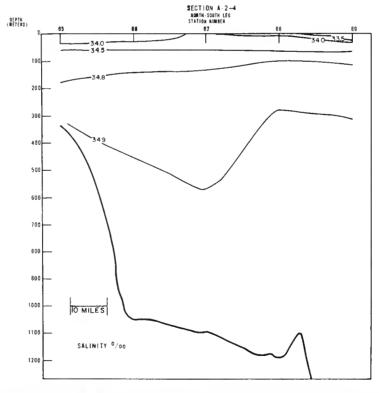


FIGURE 21(b). Vertical cross section of salinity (‰) on North Atlantic Standard Monitoring Section A2 on 6–7 November 1966, prepared from data of USCGC EVERGREEN. This cross section contains only the north to south portion of the section.

SECTION A-2-4 STATION NUMBER DEPTH EAST - WEST LEG NORTH - SOUTH LEG (METERS) 57 ₩ 65 66 58 59 60 61 62 63 67 68 68

(METERS) 5	7 58	59 6	0 6	61 6	2 8	33 6	4	65 6	6 1	67 6	8 68	
0	1 2	3	1	5	8	7		9	10	11	12	
1	12 14	15	10	17	18	19	2.0	2 1	2.2	23	2.4	
1	25	17	28	29	3.0	31	32	3 3	3.6	35	38	
100	37 38	3.9	4.0	41	4.7	43	4.6	15	48	47	48	1
	1.1 33.8 1.8 34 0033 .0351					5 1 34 8 0984 04 30	5 5 34 8 - 8316			4 4 34 8 B347	4 B 34 B	
	0033 .0351 0 11 06 1 2.4 34 3 2.8 34	23 15 2 27	25 2 44		0328 16 1 18 4 5 34 8	04 30 4,7 34 6	- 8316 21 1 15		20 1 82 4 2 34 8	.15 1 24 4 4 34 8	13 1 03	
İ	0 0 0 01	0401	0568	0142	0 3 3 0 15 1 19	0114	0164	0607	0 0 4 4 2 19 1 59	0 3 2 a 1 4 1 1 8		
200-	3 8 34		4 3 34 6	4 3 34.9		4 4 34 9					4 3 34 9	
300	0 0	0 2 5 5 . 10 9 1	08 50 37 3 0 5	D169 08 88	6708 31 2.54	0349 15 1 25	91 F 3 05 40	30 2 51	- 0837 34 3 01	0893 30 2.49	.74 1 98	
300		4.5 34.8	4.3 34 9	4,2 34,9	4,2 34.0	4 1 34 9	4 0 34 9	4.1 34.8	4 0 34 8	4 1 34 8	4.2 34.9	
1								1				
1		0	0425	0	0708	0283	0025	0434 18 1 56	~ 0744	.0893	.73 1.96	
400		0 0			4 0 34 9		01 .09		3.9 34.9			
		3 8 34 9	4 0 34.8	4 0 34.9	4 0 34 9	3.9 34.8		1.0 3. 4	3.9 34.9	4.0 34.9	4.0 34 9	
1			1			i						
1								İ				
500												
1												
		0.031	- 0483	- 0047	0944	.011h 05 4?		.0807	1209	,1248 ,49 4,49	- 1107	
600		01 .11	-			0.5 4.7					$\overline{}$	
			3 8 34 0	3,9 34.0	3,8 34 8			3.9 34.9	3.9 34.9	3.8 34.9	3.8 34.0	
			1					[
,,,					[1				İ
700					1							
									ļ			
İ			0142	.00g4	. 0 3 1 7			.0187	0744	. 0878 . 34 3. 16	0673	
800												
1			3 7 34 9	3.8 34.9	3.8 34 8			3.7 34.9	3 7 34.9	3,7 34.0	3.7 34.9	
				•								
900			}	ŀ								
- 1			ŀ									
			- 0047	0 0	0.047			9037	- 0328 1: 1 17	0324	0327	
1000			02 17	0 0	02 17			0 t 1 J	1. 1.17	12 1 16	12 1.18	
1												
							_					
	1. 5.5 32. 0078	5 2. 5.3 28 29	32 8	3 5.4	32.7 4	6 3 33 9571	2					
	0.4	28 29	7 80	4.7	2 67	38 1	9.5					
	5. 8 0 33	7 8 8 <u>5</u>	33 9	7 10 1	33 8 8	0 9 33	. 9					
	0.4	1 7 27	1 00	. 06	21	14	4.6		10 M I	LES		
	9. 0 0 33 0912 82 3.	9 to 8 7	34 0	1 8.1	34 1 12	7.2 33	. 6					
1	82 3.	9 10 8 7		45	1.94	. 42 2	. 0 3					
1	13. 3.2 32	7 14 1.8	32 6 1	5. 3.0	33.1 10.	5.2 33	. е					
	0.3	38 .19	1.78	5. 3.0 D7	33.1 18. 23 2.50	.20 \$	1					
							1					
	7.3 34.	0 18 9 0 13 De	0088 . 24	.04	38 . 13	210773	78					
1	1								00£ Fû+	1010 MUY3 I		_
	21 8 7 34. .0282 86 2.	0 22 8.1 74 .07	0091		34 2 24 74	n < 0278 34	0.6	MEAN TEMP			SALINITY " U	0
	1						I .		410" 013			
	75 3 33. 5 1998 -1 35 178	4 26, 1	33.5 2	7 1.5 05	13.8 28 51	0 392	2	110 ⁸⁰ Cm	SPORT I sec	A10	PR4MSPORT Bms/sec	l i
ļ						18 1	38					_
1	79 6.0 34 ~.00?4	4 30. 7.0	0118	7.1	34 3 32.	7.2 34	4					
į	.01	08 Dā	4.7	. 0 2	. 0 9	.18	87					
	33 6 5 34. 9724 47 ?	5 34 5,7	34 5 3	5 5.0	34.5 36.	4.8 34	. 5					
	47 7	57 1	6.7	. 13	.68	* 0212 16	.75					
	37 2 33	6 36 8	33.6 2	9 1.9	3 (1 40.	3.8 34	. 5					
	37 2 -, 0012 0	0.4 0.2	0342 119	.08	1,58	0 4 D 1	43					
	41 5.0 34											
	41 5 0 34 0012 01 ,	04 .08	0153	01	17 08	8.0 0275 17	9.8					
							,					
	45 5 8 34 .0807 .35 2	, 48 4 7 17	0188 88	41. 4.5 0.02	34 / 48 08 74	4.8 0172	8.7					
				. 00		, 00						
L												

Figure 22. Solenoid division of North Atlantic Standard Monitoring Section A2 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 6-7 November 1966.

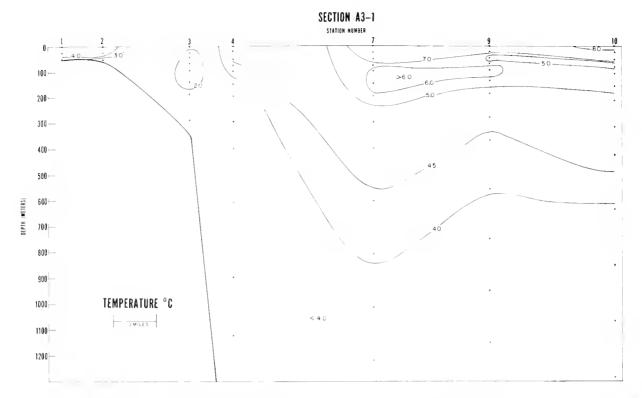


Figure 23. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A3 on 23-24 November 1964, prepared from data of USCGC MENDOTA.

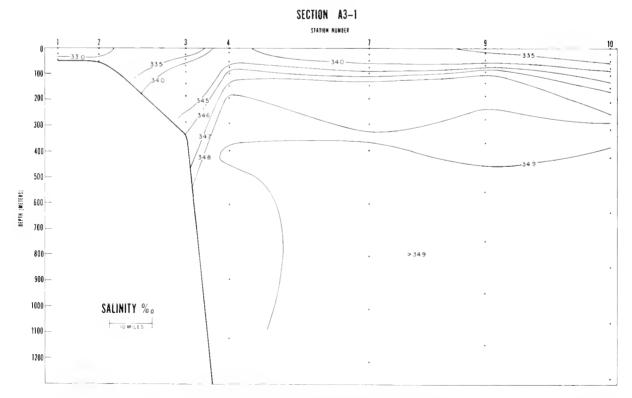


Figure 24. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A3 on 23-24 November 1964, prepared from data of USCGC MENDOTA.

SECTION A3:1

ls)	1	2	3 4			1				В		
" [9	1						- 11		-	12	
	,				10			17			18	
- 1	13	14	18		21			22	_	-	23	
100		3 01 34.004	20 20 20 404	3 43	34 700		141		14 712	5 71		34.838
		. 217 1881 3.79	. 2 20 2 6 4 3 48	2.171	3888 -14.28		1.101	1788	0 39	181		-3 60
i		2,16 34 238 0488	2 87 34 548 727 8 00	5.12	- 3131 \$4.778		5 77	1393	34 748	8 11	- 0111	34 878
200		. 104 0410	127 8 00	-1 804	-11.22		. 163		4 90	- 314		-2.75
200		, 2 31 34, 481	2 98 34 833	4.53	34-192		5.05		34 788	4,78		34.774
										1		
1		980 .03891.35	1 001 395414	-1.017	. 4278 -15 34		. 837	1027	8 90	- 475	0299	-3 38
300					14 879		4.94		34 915	4.50		34 887
		2 72 34 590	1.28 34 749	4.27	14 179		•.••			1.77		
					-, 2497			1121			0980	
		.000 .5006	777 2370 48	-1.07	-8 87		620		4 08	- 581		-2 61
400			3 49 34,828	4.10	\$4.687		4 39		34 833	1 20		34 929
			[1 1							1		
			1							ł		
500 -			1 1							1		
1			7440		- 2451			1105		- 1	0888	
			857 8 77	-1.928	-0 32		927		4 31	- 284		-2 49
ا مور												
B00 -			3 43 34 952	3 85	34 \$30		4 08		34 847	3 87		34 815
i										1		
i			1 1									
700			1 1									
			. 0741		- 0102			0458		1	e. 518#	
			284 2 88	- 315	-9 17		187		1 05	001		00
800												
000			3 39 34 861	1 77	34.872		3.15		14 832	3 71		34 915
										1		
900 -							l					
							ļ			i	0079	
l			0073		8183		0.46	0920	+1	027	00/1	20
1000 —			028 28	00	91							
1000												
l l	L											
	10 M	ILES										
i								7				
- 1			1 4 70	32 934 2	3 33 1802 33 128 488 5.13	3 3 20	1789 23 797	i	13. 2.1	00018 03 ,00	14. 1.	.88 39.8. 8807 3.1
- 1			- 039 007	29	480 9.13	. 67	1 8 22	1	- 0	03 , 00		. 189 3. 1-
- 1			4 5 97	33.795 8	7 30 33 438	8 7 84	29 397	1	18. 2.0	9 94.228	18 5.	. 49 \$4.1
			4 5 17 -2 282.378	11.17	7 30 33 438 1 233 8 8 8 92	-1, 17	1478 -9 08			5 . 1805 5.89	-1.	49 2075 489 -9 4
					2 53 43 181	9. 1.01	11 117	1	1, 1,	1 33 842	10. 5	70 .
			7. 9 93 8 38	11	2.53 272 1077 3 70	. 48	1935 3 78 1		1	1 1249 25 4 37		70 513 -3.1
								1				
1			15 8:05 -1 837.219	11.14	0 34 23 013 002 1510 5 23		33 883 181238_4,28	1	" ' '	1 .0846 81 9.30		.67 .1000 34.3 .400 5.8
			L					الم	1			
									11 11	4 31 2385 31 -8.37	22 0	32 888 34.8 3.7
									1			
1					MENH STEEMILLA 6/0					3 34:387		
1			MEAN TEMP OF	****** ****	BEAR STEINING 7/8	1			6	02 -3.31		
		THWARD FLOW		10 . 10 . 10 T								
l l	(T) 6011											
		THWARD FLOW	HEAT TRANSPORT	,	* BALT TRANSPORT - XTO EMEZONO							

FIGURE 25. Solenoid division of North Atlantic Standard Monitoring Section A3 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC MENDOTA, 23-24 November 1966.

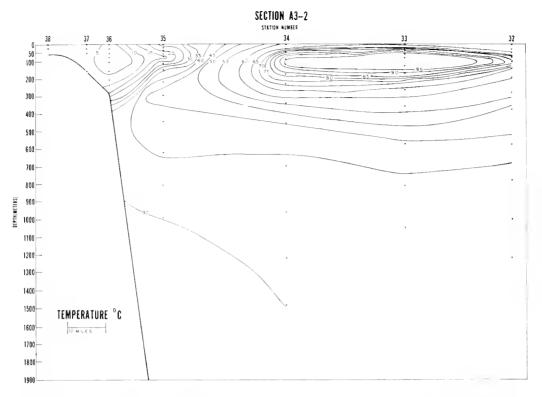


Figure 26. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A3 on 28-29 January 1965, prepared from data of USCGC INGHAM.

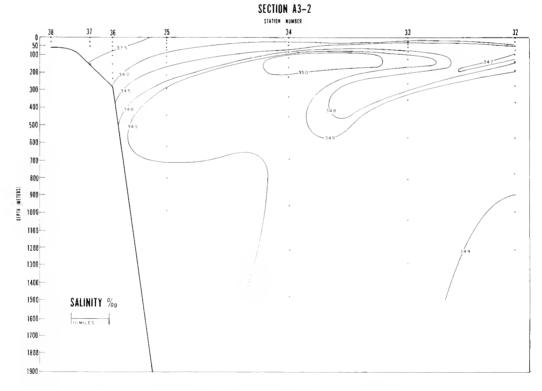


Figure 27. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A3 on 28-29 January 1965, prepared from data of USCGC INGHAM.

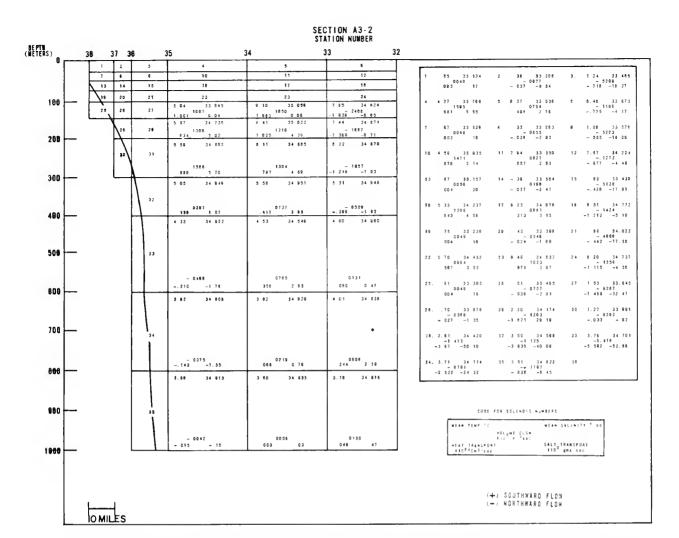


Figure 28. Solenoid division of North Atlantic Standard Monitoring Section A3 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC INGHAM, 28-29 January 1965.

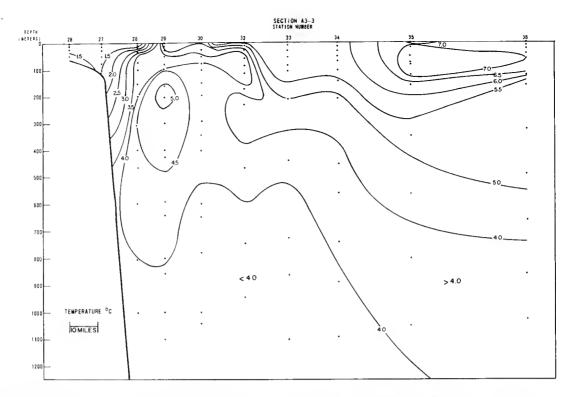


Figure 29. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A3 on 14-15 February 1966, prepared from data of USCGC DUANE.

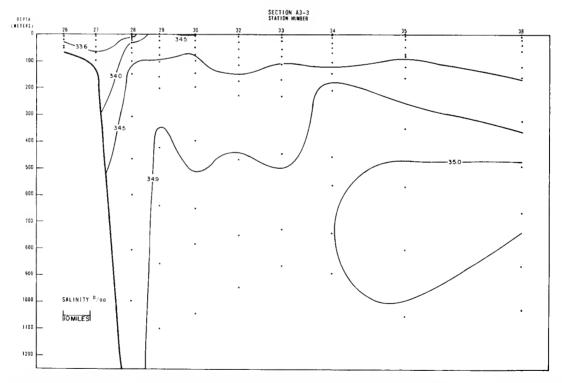


Figure 30. Vertical cross section of salinity (‰) on North Atlantic Standard Monitoring Section A3 on 14-15 February 1966, prepared from data of USCGC DUANE.

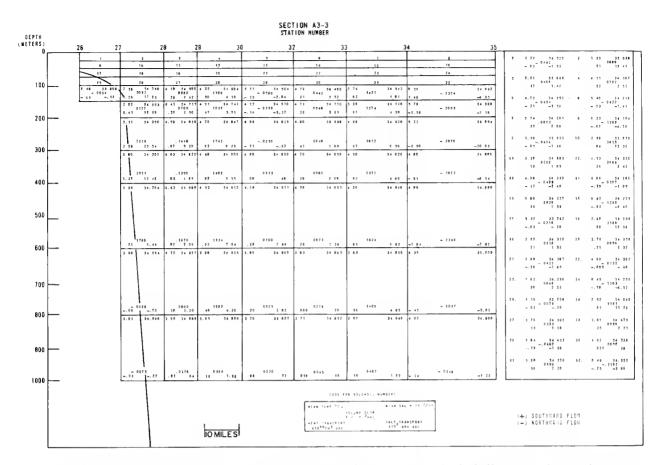


Figure 31. Solenoid division of North Atlantic Standard Monitoring Section A3 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC DUANE, 14-15 February 1966.

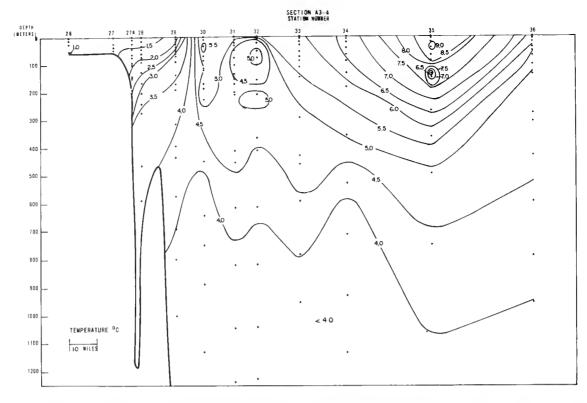


FIGURE 32. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A3 on 9-10 March 1966, prepared from data of USCGC HUMBOLDT.

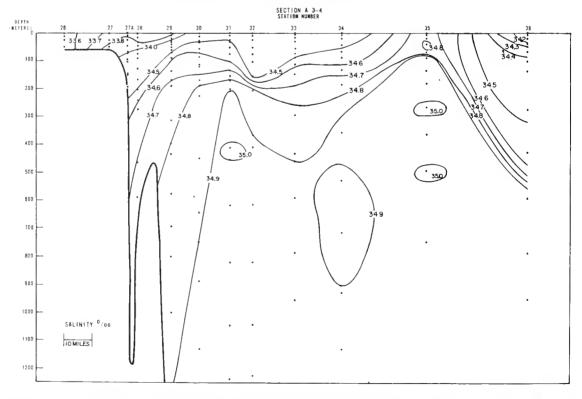


FIGURE 33. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A3 on 9-10 March 1966, prepared from data of USCGC HUMBOLDT.

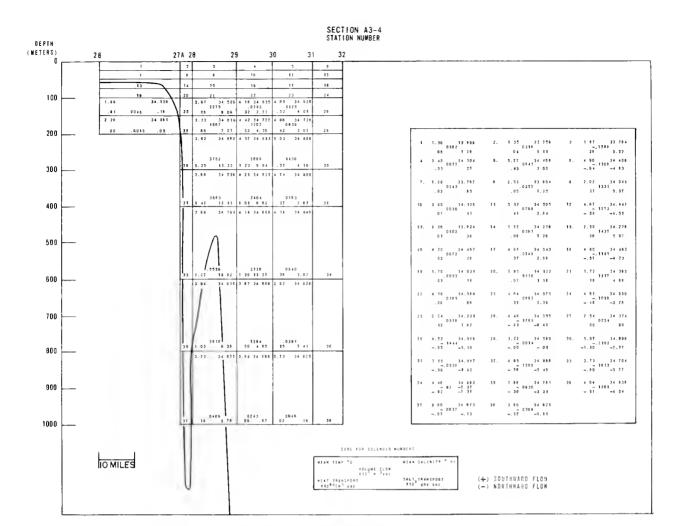


FIGURE 34. Solenoid division of North Atlantic Standard Monitoring Section A3 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC HUMBOLDT, 9–10 March 1966.

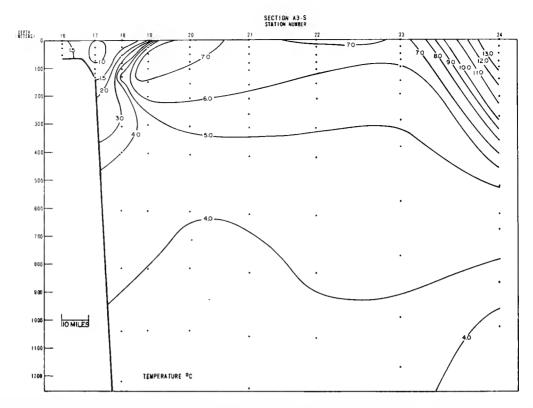


FIGURE 35. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A3 on 4–5 April 1966, prepared from data of USCGC EVERGREEN.

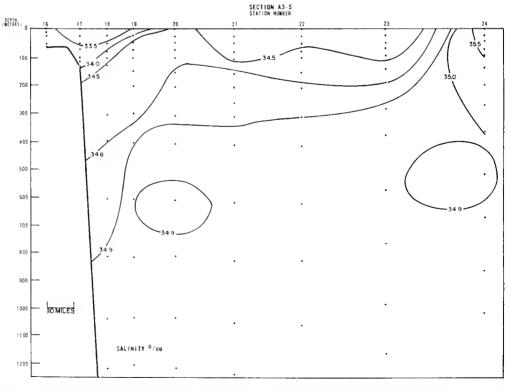


Figure 36. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A3 on 4-5 April 1966, prepared from data of USCGC EVERGREEN.

SECTION A3-5 STATION NUMBER DEPTH (METERS) 22 13 22 18 19 10 21 28 100 14 80% 24 373 0324 1 15 0045 779 33 34 39 -. 0311 0584 - 7074 1271. - 20 6 38 14.787 1220 8 17 - 0293 -1 04 6 18 0490 12 1 71 -0 15 -24 85 13 -. 10 200 34.889 8 26 10 017 3.05 3 30 39 34 811 24 242 3.24 30 811 5 72 9 93 . 28*** 12200 9408 -1.48 - 08 300 3_83 1 08 10 021 1 99 30 779 5 00 4 11 30 844 5.03 24 885 . 12 1.22 36 30 - 20 31 2 10 -3.98 400 4 85 34 945 5 00 34 844 4.83 34 945 1 72 34 151 500 50 4 25 1414 0183 -2 8 2 800 24 847 34 844 4 29 34 613 . ,, 4.07 34 87 700 - 1411 3470 -.0073 -.03 .0298 12 -1 10 - 81 -5 83 1. 37 32 51 - 01 900 4 10 24 983 14 011 14 071 4 04 800 - 0027 - 01 -. 0006 - 84 - 0818 -1 81 4 72 1000 5 19 ... 2 73 - 1311 - 05 22 484 -7 10 0821 1018 2.23 - 12 -. 03 34 413 7 01 34.032 7 14 34 443 0233 0 2 8 7 10 . 34 7.06 5 10 - 24 - 8446 -1 184 33 410 75 0233 34 177 7 31 34 858 2 27 8.5 33 442 -3 72 9999 34 108 2 12 7 32 34 485 1 13 8 50 8 18 - 4312 -13 57 14 470 - 67 8 98 17 34 411 9 75 34 484 0782 0249 0.0 0757 14 382 5 3 4 0710 -2 53 18- 10-02-, 4489 15 007 1 11 13 499 1014 0002 0810 - 0284 108 1 02 1901 FD4 3018+010 #LP81+1 wise dayle to Voc (+) SOUTHWARD FLOW when ther to OMILES

FIGURE 37. Solenoid division of North Atlantic Standard Monitoring Section A3 including mean temperature, mean salimity, volume flow, heat and salt transport values from data of USCGC EVERGREEN. 4-5 April 1966.

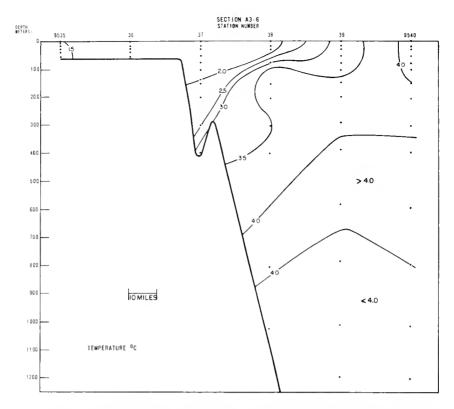


Figure 38. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A3 on 16–17 April, 1966, prepared from data of USCGC EVERGREEN.

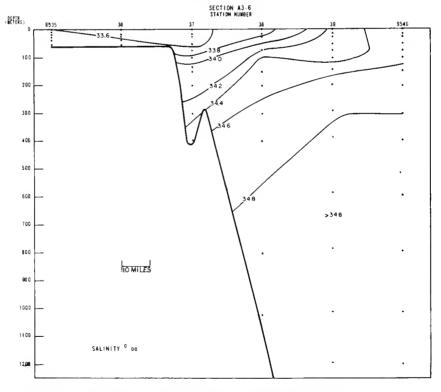


Figure 39. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A3 on 16–17 April 1966. prepared from data of USCGC EVERGREEN.

SECTION A3-6 STATION NUMBER

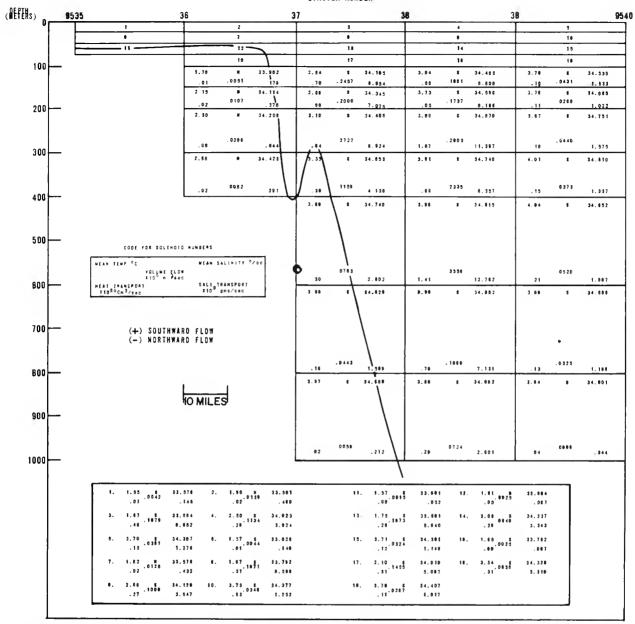


Figure 40. Solenoid division of North Atlantic Standard Monitoring Section A3 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 16–17 April 1966.

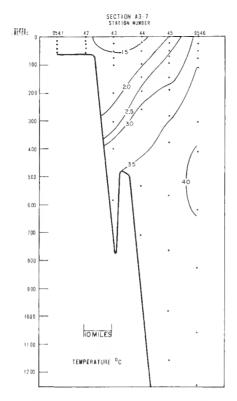


FIGURE 41. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A3 on 18– 19 April 1966, prepared from data of USCGC EVER-GREEN.

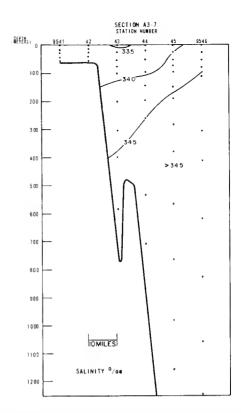


FIGURE 42. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A3 on 18-19 April 1966, prepared from data of USCGC EVERGREEN.

Figure 43. Solenoid division of North Atlantic Standard Monitoring Section A3 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 18-19 April 1966.

(+) SOUTHWARD FLOW (-) NORTHWARD FLOW

. 11 0273

IO MILES

1000

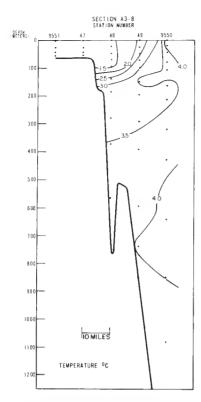


FIGURE 45. Vertical cross section of salinity (‰) on North Atlantic Standard Monitoring Section A3 on 21 April 1966, prepared from data of USCGC EVERGREEN.

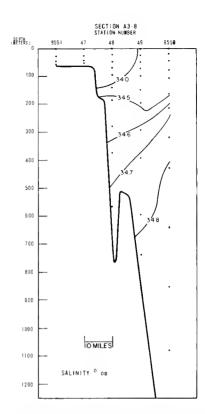


FIGURE 44. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A3 on 21 April 1966, prepared from data of USCGC EVER-GREEN.

SECTION A3-8 STATION NUMBER

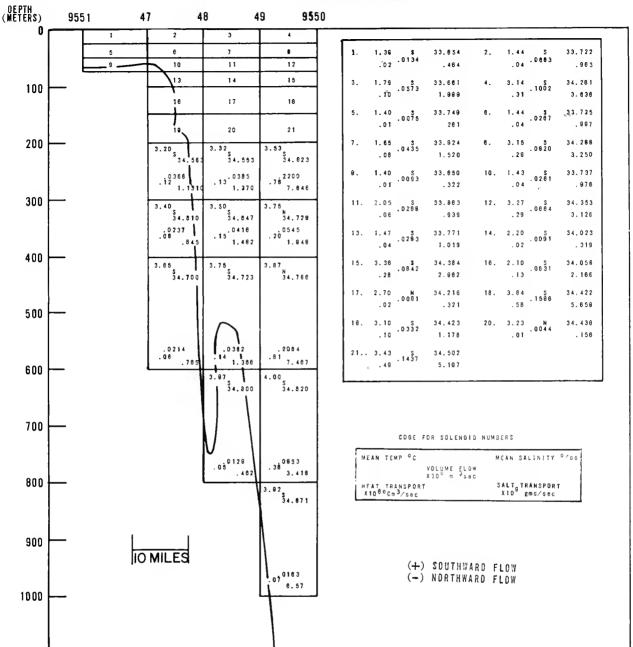


FIGURE 46. Solenoid division of North Atlantic Standard Monitoring Section A3 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 21 April 1966.

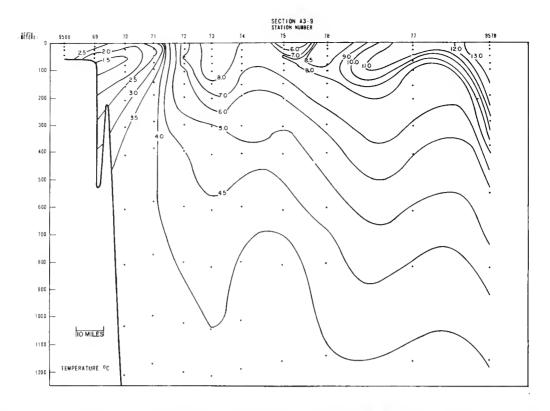


Figure 47. Vertical cross section of temperature (°) on North Atlantic Standard Monitoring Section A3 on 25-26 May 1966, prepared from data of USCGC EVERGREEN.

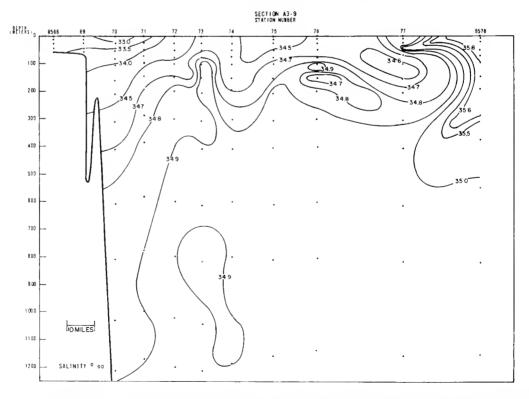


Figure 48. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A3 on 25-26 May 1966, prepared from data of USCGC EVERGREEN.

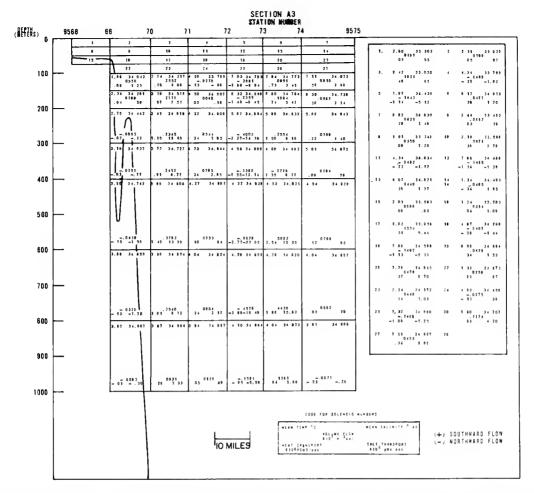


Figure 49. Solenoid division of North Atlantic Standard Monitoring Section A3 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 25–26 May 1966.

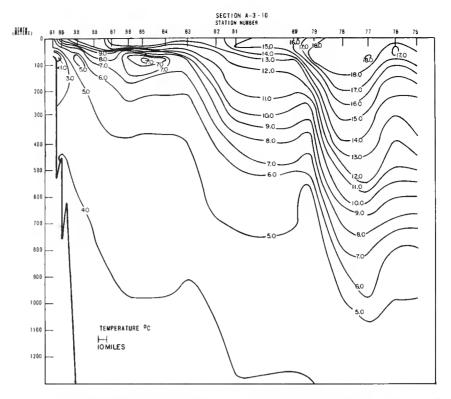


Figure 50. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A3 on 9-11 November 1966, prepared from data of USCGC EVERGREEN.

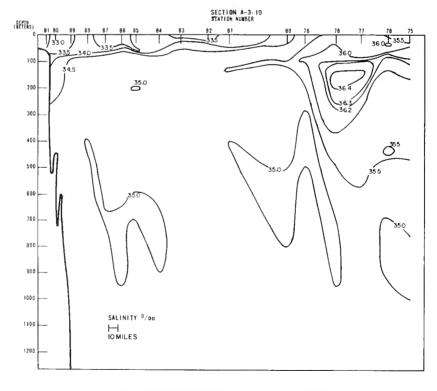


Figure 51. Vertical cross section of salinity (‰) on North Atlantic Standard Monitoring Section A3 on 9-11 November 1966, prepared from data of USCGC EVERGREEN.

SECTION A-3-10

	1,	18	79	20	3 21	2.2	1 11	2.8	21	28	- 11	12	29	14	15	32
	17	14	35	29	37	38	28	48	41	42	+1	**	45	- 10	67	- 41
0	1.7 24 0 0511 08 1 80	30	5 7 24 7	92	8 7 34 1 0 000 1 40 2 35	06	2.1 34.8	7.6 34 7	57 8.1 35.0	58 11,7 35 2 3591 4,18 13,08	39 12.4 29.4 .1217 1.01 4.44	90 10.2 20 7	81 10.9 26.2 3631 23 35 31.81	82 18 0 38 6	83 18.6 38.2 = 4500	84 18.1 38 0972
	08 1 80	3 4 34 4 13 4 8	0 0	11 8	8.3 34 B	.04 .21	8 7 24 9	1 13 3.76 5 3 14 8	1.02 7 0	1 4.18 13.08	11.1 35 6	2.55 8 62	15.4 28 1	77 1.01	1.35 18 78	1 41 3.3
0	03 41 3.0 34 3	3 4 34.9 -,2129 -12 1 50	12 .00	0 0	. 38 7.18	. 92 9 . 12	08 44 8 7 34 6 0 1 07 3 8 34 6	011140	1.27 3.3	3,87 17.26	1.42 4 46	1.80 4.67	13,5 23 8		15.0 18.2 3050 8 27 ta.71	
	1															73.0
0					1 48 2.12	01 10	10 122 10 1.10	1.20 2217 82	1 01 3 1	7.7 35.1	2.80 9 10 6 5 26.1		2,4058		6.61 24.62	
	3 8 34 7	4 1 24 6	4 7 34 1	5 0 34 6	5 1 34.6	3 34 6	3.1 34.0	5.2 34 8	8.2 35.0	1.7 35.1	1 3 30.1	8.4 33.1	11.4 33.5	14.2 39.9	111 1 11.7	12.4 25.
0	.00 .0744	C.07. 2340		.0049	0517 27 1.03	.02000	15 1,06	1.02 1072	, a; 0108 ,	1544 265,12.00					7 04 18 50	
	4.1 24.0	4.1 14.9	4,4 14,0	4,9 35.0	4.8 19.0	4 9 15.0	4.8 33.0	4 9 39 0	3.1 39.0	3 9 35.0	9 2 25.0	8 4 39 0	8 0 39 2	12 1 15 2	11 9 37 3	16.6 39
8_																
0_	. 6i 8108 . 3e	1.21 10.92	1 04 1.03	01 0147 . s	. 20 1.90	.07 0147	18.0282	1.33 11.87	1.20 0.4	4064 5 2.40 14 70	2.20 13 11	0000	2 8225 21 48 90.10	3879 4 70 14 21	a 27 20 01	- 3754 4.09 13
	4-1 24.9	4.6 34.6	4 0 24 8	4.7 39.0	4.2 35.0	4 3 39.0	0.3 15.0	4.4 39.0	4 0 25.0	4 8 35 0	2 1 15 0	2 0 35 0	8.1 35.0	8 2 35. t	1.7 35.1	7.3 35.
	.01 .0014 .03	21 1.93	1170 . 15 4, 83	.0168 .7	. 59 . 62	.01 ⁰⁵⁴⁵ .11		.05 7.84	1.0;7728 4	.1861	1.02 7 28	.0446 22 1 81	1 6016 10 93 84 61	1 11 7 55	2605 2.23 TO 11	.8301 .21 (
	2 8 34 8	1 6 14 8	1, 0 14 9	4 0 35 0	4 1 15 0	4 1 35 B	4 1 39 0	4 1 35 0	0 1 39 0	. 4 4 5 8	3 9 39 9	4 1 35 0	5 1 35 0			3.3 34
	1, 73, 121 1, 73, 121 13, 18 2 12 18	33,4 e 11 ,28 ,28 ,28 ,28 ,28 ,28 ,28 ,28 ,28 ,28	13.8 33.0058 34.7 2358 5.1 14.7 2358 5.1 15.0 2258 25.7 1100 3.1 12.8 24.1 15.8 14.2 24.1 15.2 2	.2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11.2 32.6 .32 1 87 12.8 31.6 .0203 77 (5.2 32.6 1.01 2.21 1.01 2.21 1.01 2.21 1.01 2.21 1.01 2.21 1.01 2.21 1.01 2.21 1.01 2.21 1.01 2.21	9, 12 0 12, 18 0 2 TB, 11 3 3 28, 13 9	2.4 33.5 37 0.53 1.56 3.8 23.8 2.60 1.7 34.6 2.60 1.7 34.6 4.88 1.7 25.4 1.30 2.89	0788 31 2.58	33. 27. 41. 45. 1 48. 1 69. 1	11,1 0 24 2 13 1	36 7.2 6 42, 11.4 2.6 48, 18.6 30, 2.3 .2 84, 7.4 .0 38, 11.3 2.2;	1245 33.4 4 4 29 34.1 22 87 2128 34.6 3 1 34 22 87 2128 34.6 3 1 34 2128 34.6 2128 34	10 1. 1.0 0. 1.0	0251 33.1 0251 39.1 34.0 00033 13 0013 2.38 0013 2.38 0213 35.9 0213 35.9 0214 8 021 20 021	48, 8,6 92 92 92 92 92 92 92 92 92 92 92 92 92	87 14 5 3 40 19,6 4,58
	76 3 ,888 17,74	25.28	19.7 .0200 32	9 81, 1 24					12	.T 28.5 .1078 : 84 28.28	92, 75)	\$8.1 ,0212 ,78	#3, 17.3 #.2 #.#1	36, ¶ 923 8 38	14. 17.0 .0301 .85	1.86
				MEAN TE	CODE FOR COL MP °C VOLUME \$10° a (\$NSPORT m3/eac	51.00 51.00	AN SALENSTY O	'00	(+) (-)	TUTHWARD FL RINWARD FL	M 0.4					

Figure 52. Solenoid division of North Atlantic Standard Monitoring Section A3 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 9–11 November 1966.

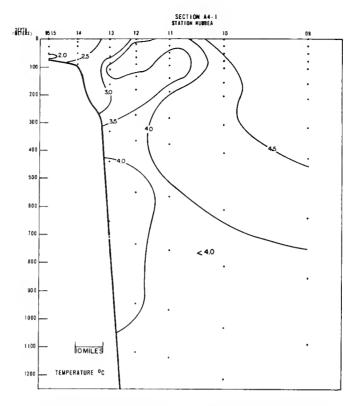


Figure 53. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A4 on 2-3 April 1966, prepared from data of USCGC EVERGREEN.

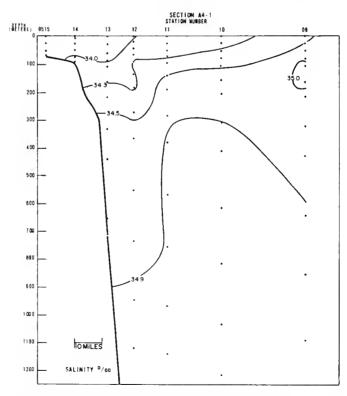


FIGURE 54. Vertical cross section of salinity (‰) on North Atlantic Standard Monitoring Section A4 on 2-3 April 1966, prepared from data of USCGC EVERGREEN.

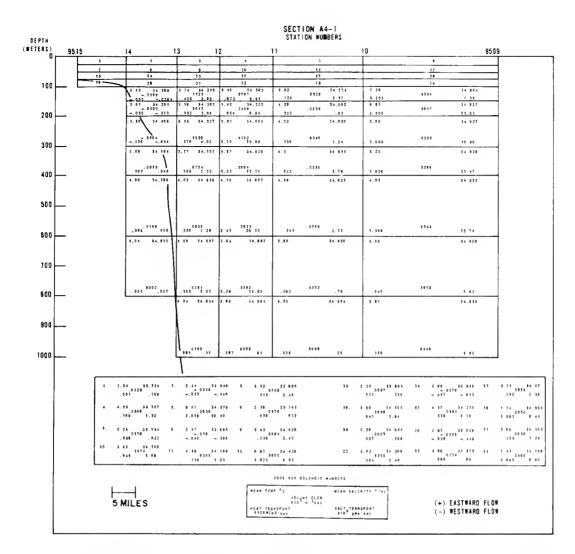


Figure 55. Solenoid division of North Atlantic Standard Monitoring Section A4 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 2-3 April 1966.



FIGURE 56. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A4 on 22–24 May 1966, prepared from data of USCGC EVERGREEN.

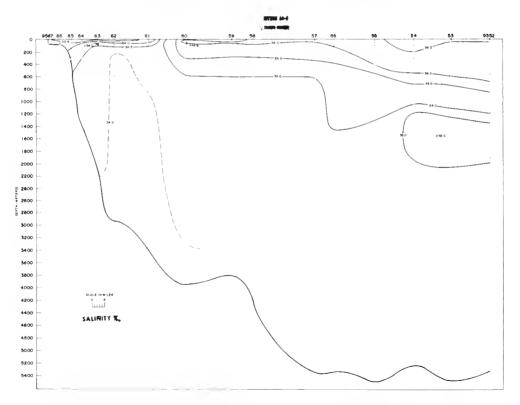


FIGURE 57. Vertical cross section of salinity (‰) on North Atlantic Standard Monitoring Section A4 on 22-24 May 1966, prepared from data of USCGC EVERGREEN.

SECTION A4-2 STATION NUMBER

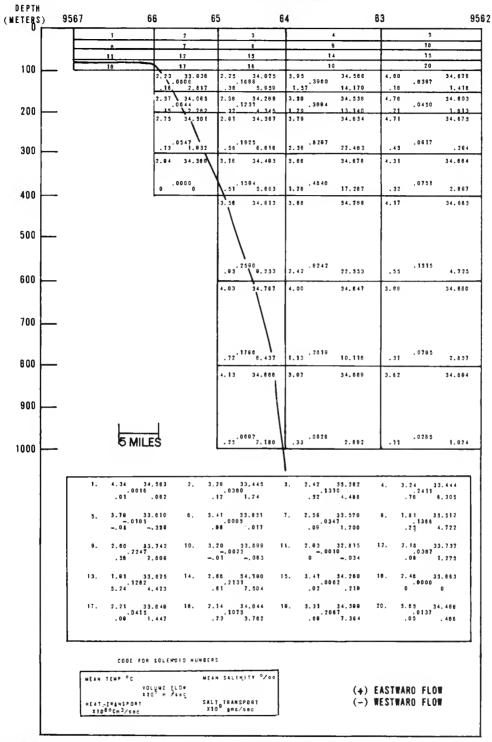


FIGURE 58. Solenoid division of North Atlantic Standard Monitoring Section A4 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 22–24 May 1966.

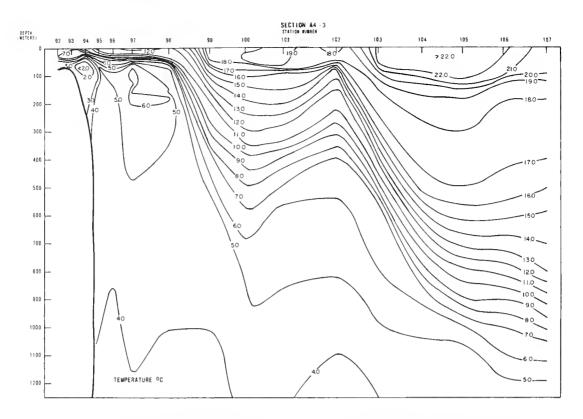


Figure 59. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A4 on 11-13 November 1966, prepared from data of USCGC EVERGREEN.

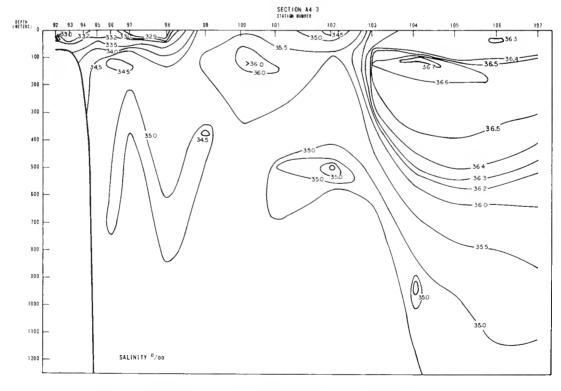


FIGURE 60. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A4 on 11-13 November 1966, prepared from data of USCGC EVERGREEN.

SECTION A-4 - 3

H (\$)										2	TATION NUM	SER							
") —	92	93	2 1	14	9	5	- 8	9	97	98	99 1	00 1	01 1	02 1	03 1	04 11	D5 1	06 10)7
	-		_	19	\neg	- 11		20	21	2.2	22	24	35	21	27	28	20	30	
"L	- 1					34 48		50	38	52	38	38	35	98	97	13	20	85	
			34.1 00 .91	1.2	34.4 128 7.8	4,7 3 ,184 ,88	4.8 1 0.13	5.8 34.8 -, 1788 1.02 8 30	0.3 34.9 0820 43 2.9	8.6 35.0 7441 1 8 85 28.8	14.9 35.8 5212 7.36 18.34	12.8 38.0 .0108 .25 73	14,8 35.7 .5985 7,15 18.71	15.4 38.0 -, 1436 72.88 53.28	10.8 38 8 -1.7518 34.80 98.01	20.6 38.6 -, 8525 13.84 74,87	20,4 38.1 .2470 1.15 6 26	18.3 38.5 0818 1.58 3.08	
00		2.8 00 .01	14. 3 24 . 93	3.8,19	34.8 38 8.80	4.8 72 .71 72 4 4 3	4.8	5.3 34.7 1330 .21 4.70	. 20 1 0 . 20 1 0	6,7 39,1 -,0077 6,27 21,0	13.0 35.8 8848 1 8.44 18.19			14,8 35.8 -3,3128 18,42 48.57 13,8 35.8					
		00	10.04	24		!!	ا؛	÷1704	,0353	0. T3 11. 2	7.8892	.0000	.0100	-2.2552	-3.2220	-1.1104	1002	2033 3.81 7.85	
		<u>. </u>				4.1 1				8.4 38.0		10.7 29.4			19.1 19.3				
				. 31 01	3.09	1.16131	3, 13	-, 0870 , 48 2, 48	.11 .7	8035 2.23 18.81	8.26 24, 17	.0870 .83 3.17	5.38 21.78	-1,8478 10.73 80 35	-2.8708 47.78 110 8:	~1, [484 20, 28 43, 20	1.10 2.52	3 F2 8,27	
00			ŀ																
00						2. 84	20.01			2,24 10.0	4.71 24.11		3,85 32.02	=1.7850 73.87 83.88	57, 88 189,71	-2, 1808 35, 73 81, 33	0228 .49 1 04	-, 3783 8.14 14,14	
			1	4.7	34.1	4.3 3	*.0	4,5 31.8	4.3 35.0	4.4 31.8	5.1 30.0	5.8 35.7	5.4 35 1	8.9 35,1	7 35.3	12.1 35.8	13.3 39 8	13 7 39,9	
00																			
00							\rightarrow		.070184	+	1383 88 4.92							8. 28 22 51	
				4.1	34.1	4.0 3	۱.۱	4.1 19.0	4,2 35.0	4.1 39 0	4.8 350	4.8 35 1	4.7 30.1	9.0 35.3	0.6 20.3	7.5 35.1	1.7 30.2	8 1 30.3	
00																			
00					۰	. 1i ¹³²	24.10	0.0151.55	.07 0154.5	. 74 2.08	02 .18	0318 10 1.15	. 27 2, 11	-, #127 , 80 4,87	4173 2.48 75.60	4.01 10.47	-,0814 .54 2 23	2.88 1.88	
	τ.	7.8 3120	1.3	2.	7.1	33.3	1.	8.1	53,2 4,	19. 2	,	11 1	1 1143 33.7	34 5.2	0300 33.7	37 7 5	144 2.82	38 5.7 07	33.7
		11.8 3/								18,9 39 -, 2134 3,98 7	- 1	37. 11.	5 34.4 10 15.65	31 11.1		11 11 4		40 17 4	
	1.	18.2 2.0882 1.88	1.03			34 B 41 10,82		11.1		22.2 31	. 2	41. 10.		42. 22.1	30 1	43. 21.4		3.30 44. 21.8 3.98	
	11	. 22.4 2787 6.47	1.3							3, 2 3, 2 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0	- 1	l .		48 2.0		47 1 1 1 0 0 0 0		48 2.7 .1236	
	12	. 4.1 31 1.3.2885									,		5 34,2 0582 28 2,08	90. 6,2	34 4	21 0 0	34-3	52. 5 8 - 4168 4 88	14 7
	ſ									19.3 30		93. 19.			18.0				38 1
	20									22 . 4 38 -, 3788 8 . 43 14		97 21.						90 20.7 ~ 0088	
	7.6												101 FGB 1011H	DID HOMBERS					
	L											MEAN TEMP	YOLUME E	F 0.4	541.6N1T7 °/oc TR483PB#T ##5 8#C	Ì		WARD FLOW WARD FLOW	

Figure 61. Solenoid division of North Atlantic Standard Monitoring Section A4 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 11-13 November 1966.

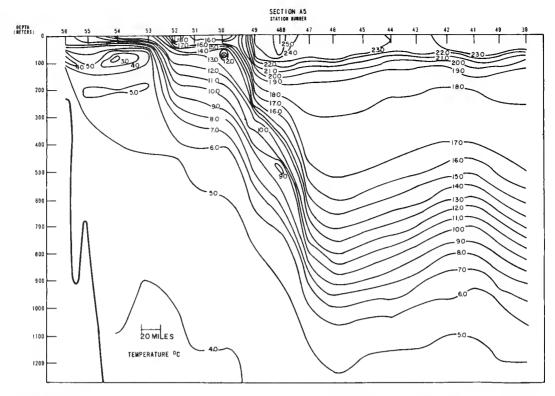


Figure 62. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A5 on 1-3 November 1966, prepared from data of USCGC EVERGREEN.

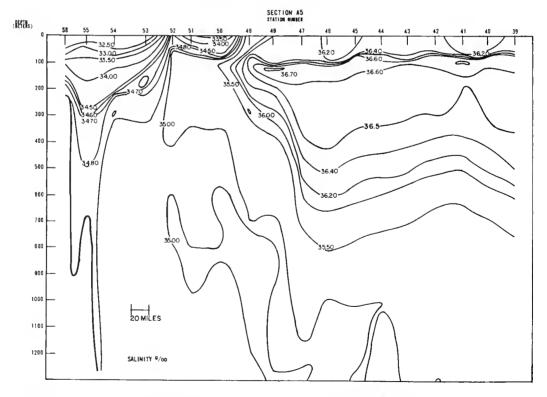


FIGURE 63. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A5 on 1-3 November 1966, prepared from data of USCGC EVERGREEN.

:	56	55	i	54	5	3	1	2	. 5	<u>t </u>	;	0		19		48		47	4				1	4	3	42		41		40	
	3	\Box	2	<u> </u>	,	:					8		7	ļ	•	1_		L	10		١	1.2	1	$\overline{}$		_	- 13	\dashv	,11	+	- 17
	 ;		10		20		1 0	,			2 3	\vdash	*1		2.5	+-	10	╁	2.7	- 2		2 h	- 21		3		32	+	33	-+-	3.1
	,	7	5.3		5 4	-	3 3	3	•		3 7		3.8		5.0		8.0		6.1		2	0.1	- 1			5	8.6	ı i	B 1	\pm	11
	3.0		2.31 18 49		14 2 1630 46	6.7	1533		35 3 2013		35 A - 1128		38 0		38 8		1 88 8		30 0 17 14 5 1 2			10 5 20 8 5 33 10 73	19-1	75 P	7 95		18 4 30 16 80		8 50 15 8 50 15		5 38
			5 0 34 2 7 82 14 16		3 40		34 8 1035 3 91				22.2	14 2	35 8 6267 37 93	18 1	35 3	1 1 h		10.1	: 117	U	28.0	18 5 38 F 4 38 6 24	13 2	26,1	10 1	2 b b	10 h 20	77	0 50 IP	6 16	13 10
											_	_				_		_													
		1161	5 3 34,8		34 8	٠,٠	1004	٠٠.	. 321		- 1021	" " 1	33.0	" -	30 13	1".	3 4587	"	2 - 20 il	l" ' 3	136	10 1 18 3	'' '	íii '	",,	275"	17 h 38	.00	- 80 13 8 24	•3 "	- 50
	1.24	7414	3 24 22 03	.,	0841 3.37	ıi	1808	2 78	1171.	9.7	- 103/	10 2	32"61	22 1	3843	3	3 4387 18 174	, 10	ı, 1554,	é 97 T	730 30	1 13 18 m	1.00	13.10	u 07	373 28 30	21 47 37	186	18 21 34	05 10	75 21
	4.1	21.0	5 1 34 8	1 3	34.8	3 8	33 0	8.3	33 0	7.0	19 0	P 0	15 2	12.9	25 1	19 (39 2	13	0 10 1	17 4	28 5	11 1 26 5		10 5	13 1	31 5	17 3 38	, +	17 4 50	4 11	9 30
		l																													
	0.7	0051 18	2 28 13 57	42	2 80		•		2049 7 3 2	54	- 0772 2 78	0 57	030 I 030 I	14 2	1 1351	1 53	3 2812 74 1226	1 15	- \$055 14 37 91	4 57	380	7 15 15 25					2 20 8	30	15 27 32	7 1 8 1 10	, n i
	• 3	" '	* 3 34 6		34 0	•	35 0	, ,	35 0	3 4	30 0	• 1	35 0		30 1	13	35 7	1"	0 30 3	1770	34 4	16 6 38 3	11. 3	2h 2	13.7	38 1	15 7 16		15 5 30	' '	4 31
																					- 1										
	ŀ	- !																													
	İ	ı																													
	73	1837	2 76 21 41		1787,5	24	******	1 15	23.10	2.8	- 83]7	17	31%,	13 4	3000	9 07	-3 1307 25 188.4	111	82 80 13 -1 8088	3 07	17 77	11 23 25 27	14.01	33710	20 1.2	275 48 43	4 38 17	1 19	23 44 55	30 1	, 1 1
	••	34 0	4 2 24 8	4.3	32 0	4 4	39 D	4 3	32 0	• •	33 0	3 1	32 0		23 0	1	9 29 3	13	3 33 1	13.9	23 1	13 3 35 7	11 4	35 #	11.5	35 4	10 4 33	1	0 33	1	4 5
	ĺ											İ									- 1							-			
				-																											
	٠.,	1727	3 343	١	1433,5	11	0202	11	944		- 8289	1 4	1731	21.1	7 1113	7 10	-2 3012 20 04 1	115	-1 1815 12 43 49	5 57	010.1	3837	7 20	5788 21 26	11 12	977	1 80 1	3 4 2 5 7 8	B 44 31	1 26 >	31 7
	6.5		4 1 14 9		33 0		35 0	1.3	28.0	4.3	38 6	a 5	35 8	4.0	18.0	1	7 15 0	1	8 33 Z	0 2	35 2	P 1 35 2	7.0	35 1	1.1	25 I	9 1 2	, ,	7 0 13	3 1 7	0 1
																							ĺ								
																					i										
	٠	00072	45 5 7 1	.23	007200	. 6 2	10	0.0	0211	0.2	- 0033 16	3	0732		- 1338 8 4 5	8 1	- 5301 +4 70 0	,	71 15 70	1.20	3,00	97 3 E	1 49	1879	1 83	7 34 0 00	20	364 1 47	1.01.1	172 1	83 2
'												_		_		_		1		1							<u> </u>			_	
	1.		32 1	, ,	,	12.2	,	11 2	,	1.1	٠,	19 4	11		,	17)	11.1		34		13	0 27	4.1	11 1	10				30	71 h	- 14
		1.33	******	,	. 12 118	1 22		1.1	1213			11	,1270	19		1.75	211 1 3	14		1 24	1111	87	4 1 18 18	35 3 2			8 72 1827	3 47		7 88	1878
	٠.	17.	741 1.56	7. 20 1s	. 0 171	34.8		21 1	3300	• 1		24 5	8184 29	1	10	33 I T	421 34 2		40	17 8	0753	8 41	17 8	15 3	42	- 1	4 7 	0 1	45	24.2	7040
	l																	,													20
	'''	; ;;	474 7.48		87 228	, ,,	13					4 42	1827 7	í	1.0	1 85) to 0		**	5 70	2174	13	2 79 12			7	2 0 19 13 1 4 20 1	# 1 1 11	47	2 14	1143
	10	23.1 + 11 ²	25 1	17 23	8 6771	18-1	14	7.3	, >4 » 1 ³	1 1	19	7 0	2472				12 1		41	33.3	1150		22 5		50		5 7 76 2013 + 94 7	1 1			8872
	23	+ 11	7 33	1	6.7	2 17	,,	11.1	7	9 81		7 89	, ,		29		251 . 1			4 82	,	8.0	1 41	2 4	1						
	''	1.50	272 25.8	3	. 13 13 P		**	1 2	10788	2.88	24	17.50				24 7 	037 10 8		32.	4.1	1002 2	3 33	1 00 25	12 22 4	2	. :	1 7 00 43 24 1	3.8 2.22	35.	10	00134
	28	34 3	39-2	27 23	.1	30 2	28	23 2	1481	1.2	20	25.7	2124	2	30 :	12.0	3 P 3		3.0	12.0	11017	. 9 57	,, ,	. 15 (39		7 4 27		38	13-2	38.
		27.41	28.12	,	. 51	7		3 4	•	3.30		4.00	, ,	P1		2 31	4 1	1		1 39		10		1 4	3	11	2.53 21	0 71		10 39	17
	11	4.91	123 36.3 2 84	32 11. 1.	. 4 . 0331	3 11	\$2.	13 2	1001	9 7.47	14	1.73	8736 3P	73	13	5 4 -,11	47 ^{37 0}	,	40	79.3	7971 78	1 71	17 9 73	13 7	9.7	11	7 1 1 1 2 1 7 1 2 7 2 4	1 5 4.57	13,	21 8	1179
																				20 5 7,47	1288	56	70 4 4. 28	7.8			2.7 -,8187 75	1 37	0.7	4 11	1000
																			8.8	70 e 7 71	1083	0.1									
	L																			- 0		+1								_	_
				4																		_		_	FD# 104	4 * 0 1 0	******			_	
													OUTHW										11.						177 0 04		

FIGURE 64. Solenoid division of North Atlantic Standard Monitoring Section A5 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 1-3 November 1966.

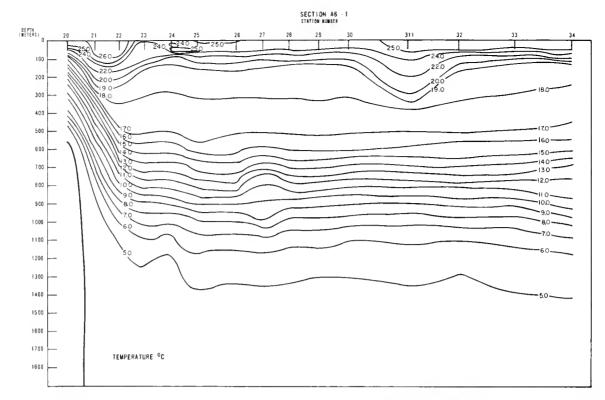


Figure 65. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A6 on 25-28 October 1966, prepared from data of USCGC EVERGREEN.

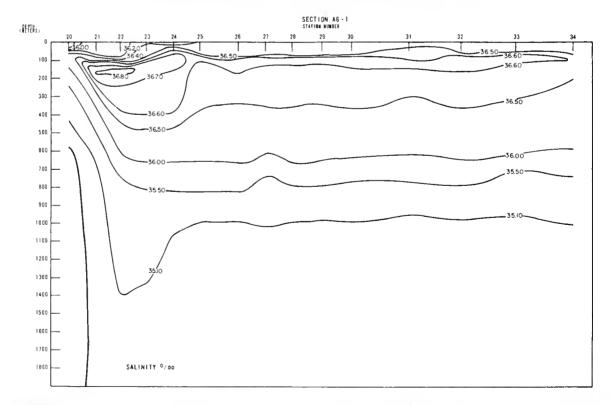


Figure 66. Vertical cross section of salinity (%) on North Atlantic Standard Monitoring Section A6 on 25-28 October 1966, prepared from data of USCGC EVERGREEN.

SECTION A6 - 1 STATION NUMBER DEPTH (METERS) 28 42 3.1 9.9 58 100 17 8 38 3 21 3 38 1 28 4 4 6 1 1 3 2 3 3 5 6 7 4 1-1258 07 200 2 48 2 14 4 84 15 02 -18+39 a. 5 12+78 as 1-19+25 11 1 17 1 11 91-744987 7950-86 120 19 11-5829 48 300 2 27 1 - 8187 2897 - 0825 25 70 4 71 9 89 1 46 3 11 400 500 - 0988 9401 1 88 2 20 8 17 20 25 - 1524 3 58 2 21 1472 1742 0888 -2788 5438 -4413 2 5 5 17 2 88 7 39 18 5 - 1182 - 7150 1 95 4 35 12 31 27 18 -2 9730 -4 8589 -1 4894 21 85 89 88 88 32 174 28 24 78 55 70 600 700 - 1407 - 4824 1 89 5 18 8 40 17 67 800 8 2 35 1 900 88⁸⁸⁸⁸24 2-13511 411 -1111 1 -28249 B 29227 42 -, 80 Q Z g . 52⁷931 32 09073 44 T 80 4 05 2 08171 09 1000 23 8 1254 18 5 14 9 10 14 1 14 1 1 28 7 742 18 1 28 1 -1 7745 46 70 85 78 28 8 278 38 1 25 4 4474 38 2 11 37 4474 18 88 24 0 1480 58 3 3 18 5 58 23 4 - 1887 2 84 - 1887 24 0 36 3 3 18 1828 3 80 7 30 5 ~ 0388 2 4 2 30 5 87 2373_{1 40} 24 7 3 49 3 5 38 24 7 1 17 0475 1 78 20 0 30 5 28 8 1007 15 1 2 81 1007 4 12 23 5 3219 81 24 0 0000 58 7 24 5 28 3 11 25 1 0315 1 10 23 8 0292 4 0201 4 25 1 1043 2 28 23 8 1493 1 55 1493 1 82 37 2 -1 53 38 3 53 40 59 39 28 1 28 74 7714 28.92 22 4 22 6 4 25_1 2371 30 1 42 20 84 33 28 5 25 13 28 18 28 28 38 29 4 58 2 8 23 . 13 27 22 8 35 4 3 62 5 88 24 5 2085 28 5 5 74 2085 7 16 24 8 0158 38 5 21 9 92 1 1 20 E 1278 + 81 21 4 0327 38 7 72 0327 1 24 24 8 39 4 1 07 9435 24 5 38 3 1 35 2 07 21 4 28 7 2 28 4 05 2111 0234 1 21 3 288 1 89 21 2 91+5 39.7 2# 2 85 245 7 39 25 2 -. 0783 98 25 7 1973 3 56 25.4 2 (72 38.5 7.86 21 3 (443 1 09 5 44 21 5 0800 38 T 2 52 0800 3 74 25 0 31 4 4 55 1120 8 81 93 21 2 38 7 21 8 500 5 7 MERR TALIFIET 5 41 *(## 1(## ⁴C

FIGURE 67. Solenoid division of North Atlantic Standard Monitoring Section A6 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC EVERGREEN, 25-28.

SALT STRANSPORT

#EAT JABHEFOAT

WOJR GRAWHTUOZ (+)

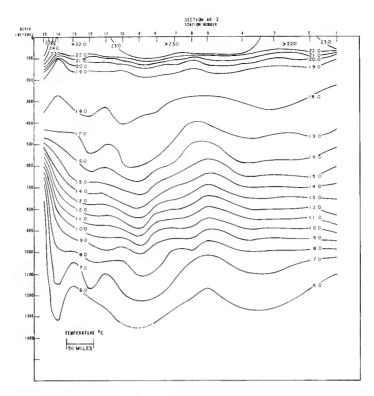


FIGURE 68. Vertical cross section of temperature (°C) on North Atlantic Standard Monitoring Section A6 on 19-22 November 1966, prepared from data of USCGC ROCKAWAY.

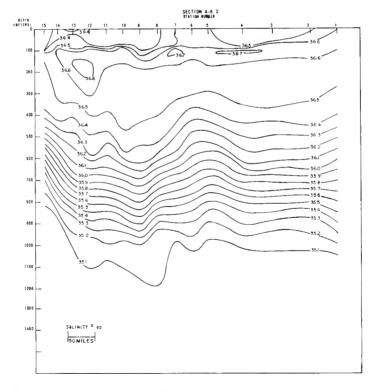


Figure 69. Vertical cross section of salinity (‰) in North Atlantic Standard Monitoring Section A6 on 19-22 November 1966, prepared from data of USCGC ROCKAWAY.

									STATI	ON A-I				
	15	14 1	3 1 I ,	2 1	1 1	10	9 ()	7	6 I 10	5 4	t ;	3	2
	15	15	17	18	19	20	21	72	23	24	25	20	127	78
	79	90	31	92	33	34	38	31	37	39	39	40	41	42
		- 11	45	48	•7	48	- 48	20	51	97	20.7 36.7	18.7 39.7	19.4 30.0	10.0 38.8
	97	58	50	80	81	0.2	6.7	84	4:	88	+. 3717 7. 35 14. 04	. 87 1,28	.08 .0061 .15	10.0 38.8 1734 3.30 0.63
	8.7	68	8.0	70	71	,,	73	74	7.5	78	7,32 14.88	18.8 39.8 .02 .04	.08 .0944 .17	-, 1488 7, 19 9, 11
	18.2	10 . 2 30. 5	18.4 ,38.5	18.3	18.2	18.3	18 4 8	38.5	18.2 36.5	18.2	10.2 30.0	18.2 38.8	18.2 18.0	18.0 38.5
	+3.0710	F. 8 488 15, 44	9 39 29 7, 22	*:0445 :82 :81	514145	0.2957 6.88	7095 13, 09	7 4743	2797 9. 01	-,5335 0 88 26.87	A. 7937	A 0123	A 0282	- 2000
	17.8	31.55	14.80	.11	15.78	9.91	20.72	17.05	10.37	-	14,43 20,87 17,6 36,5	+.0173 ,22 ,48	+.0267 .49 1.01	4,78 10.0
	38.5	17.8	18.8	18.0	11 if. 9	35.8	18.0	38.5	17.7	17 8 38 4		17.7		17.1 31.3
	43.885 58.88	+ 7856 (3.98 29.94	+.4011 7.23 15.09	+.8927 1.12 2.34	0.4182 7.54 15.74	+.2338 4.05 8.43	12.98 38.27	-,2827 6,12 17,08	4.85 8.87	9,73	13.8 29.49	+ 0042 .08 .18	. 0502 . 19 1, 19	3, 62 8, 18
_	16.3	10.5	67.0	17.2	17.4	17.0	17.4	17.1	10 5	11.0	18.2 30.2	18,7 28,3	10.7 30.1	10.4 10.2
	30.1	36.3	38.4	38.4	35.4	36.1	38.4	30.4	**	" 1				
_														
											1		1	
	+8. 2802 08. 10	40.79	- 8878 11.02	a.1792 3.08	27,24	1.33	-1 3514 23.58 50.71	12.70 29.78	7, 3111	9180 14.74	#1.2043 21.11 18.20	→ . 0847	+.0955	2114
_					-	-					21.11 48.28 19.3 39.7	1,08 2,42	1,50 3,57	11.8 11.8
	1666	13,3,7	14;3.4	14.8 35 8	15.0	15. 6 , 36. 1	10.1	39, 8	13.7	13. 1			33,1	13.1
					1									
_														
	41.8873	.,7017		D. 7844	+. 19 08	4. 4873	4.1034	1.2037	4.8617	a. 8917				
_		10, 18 28.78	17, 18	8,09	9,54		18.86	5, 18			+ 7807 10.48 28 74	# 1015 1 47 3,90	4.0211 .29 .78	-, 018 f . 22 . 56
	39.1	9,0 35,1	39.3	10.9 35.4	10, 8 35, 4	11,3 35,5	30.6	25, 3	9.71 35.3	8,77 35,2	9.32 55.2	B. 70 35.3	8.78 35.3	10.0 35.3
_			l											
										1140				1
	7.10	9,1880 1,88 0,74	:73	2.84	+.1110 1.20 4.01	1.87	17.03	- 0300 - 30 1,44	8,47	7.17	4.3131 7.02 11.17	.78 2.81	+.0845 F3 2,33	-, 0158 , 18 , 58
_			<u> </u>							-		1		-
			-											
	1. 24	01.7317	. 9 . 7.	22.7	25.4	1. 12.	5 31.4 6.0851	4.	2927 29		23.5 4.1087 2.53 4.15	7 % 19.7	38.8 72. 1818 7.23	18,8 38.8 3,7710 3,77 8,49
	8, 23													
		2011	.52	9.17	32	4.	.1848 55 7,3	0	43.7 2.40	1.81	23,7 =.0901 2,17 3,36	7 h. 19 2 5. 8	38.8 74. .3578 5 12.48	19.0 38.8 -, 2580 4,88 8.85
	21. 22										24,1 29.3 +.300 7,21 11.20			
	1	62.1870 8	. 28	3,87	4.,68	:		4	2,78	1.84	7.21 11.28	2.	7 38 0 78 -,1483 74 6,31	4.84 9.73
H	18. 22	.7 .5. 3170 .18 11	.4 17.	11.5	32 4 11	18. 22.	7 38.4 .0540	19.	23.0 31	. 3 20.	. 25,2 18,5 4,\$6 7,28			
	21, 23													
		2188 02 8	.11	6.85	7,48	2.	7 38.5 .0875 31. 3.8	1	2.19	1, 41	4,05 0.48	1		
- 1	29 23	.0 .77, 1207 4	. 4 27.	27.8	73 38, 9	26. 25.	1 38.6 .1278 4.8	78.	74.0 51 	. 3 30.	22.8 38.4	e.	DDE FOR SOLENDID NUM	BERS
ı											7.28 (2.07	MEAN TEMP	° C	wEan Sacinity 0/c
	31. 22. . 1.	3,099238	.4 31. .44	27.7 +.04	11 T. 54	23. 23.	1 38,4 .1007 32 3,7	34. : 7	23. 1 31 4. 1827 4. 45	. 3 35. . 21	23.7 2214 4 88 7.81	NEAT TARK	VOLUME FLOW	1611 1mapronner
			. 4 27.	22.7	21.6	36. 23.	7 30.1	10.	73.4 35	. 5 40.	22.8 28.5	NEAT JRENS # 100° Cm J	/110	SELT SPENSPORT IFO BOS/640
	21. 23.			1. 22 0 E	3. 59	7.	,0022 18 3.4	7	4.13	. 63	2.21 3.68			
	21. 23.	72. 2031 7							71.7 31	. 5 43.	21.7 . 28.5	1		
	39. 23. 4.	72 2031 7		22.4	07	43. 23.	4497		· 3125		9:0131	4		
	21. 23. 4. 41. 22	72 2038 7 2 38 57 0258	. 8 42. . 99		4,93									
	21. 23. 4. 41. 22	72 2038 7 2 38 57 0258	. 8 42. . 99								23.2 28 3 4 38 7.21		(+) SOUTHWARD F	LOW
	29. 23. 4. 41. 22	72. 2038 7 2. 0258 38 57 6257 38	.8 42. .99 .5 47.	27 4 2.33	92 3.48	48. 72.	7 1782 08 6.7	48. :	22.2 4.88 2108	4 50.	23.2 		(+) SOUTHWARD F (-) MORTHWARD F	T O W
	28. 23. 4. 41. 22 48. 21 51. 22 2.	72. 2038 7 2 0258 8 57. 0258 38 5 0257 38 6 0257 38	.8 42. .89 .5 47. .87	27 4 2.33 32.8 2.13	38.8 02 3.88 44 38.8 44 3.98	48. 72. 4. 51. 27.	7 1782 08 6.7 5 1180 03 8.7	48. : 0 54. :	23.2 3108 4.88 1 23.4 31 2.0533	. 81 . 81 . 8 85.	23.2 		(+) SOUTHWARD F (-) HORTHWARD F	LOW LOW
	28. 23. 4. 41. 22 48. 21 51. 22 2.	72. 2038 7 2 0258 8 57. 0258 38 5 0257 38 6 0257 38	.8 42. .89 .5 47. .87	27 4 2.33 32.8 2.13	38.8 02 3.88 44 38.8 44 3.98	48. 72. 4. 51. 27.	7 1782 08 6.7 5 1180 03 8.7	48. : 0 54. :	23.2 3108 4.88 1 23.4 31 2.0533	. 81 . 81 . 8 85.	23.2 		(+) SOUTHWARD F (-) NORTHWARD F	T O W
	28. 23. 4. 41. 22	72. 2038 7 20258 57 57. 0258 57 60257 38 60257 38 12. 0257 38 12. 0257 38	.8 42. .89 47. .87 52. .82 57.	27 4 + 10 2.35 32.8 - 08 2.13 20.7 + 1.20 24.87	38.8 52 3.88 38.8 44 3,38 38.8 20 45.25	48, 72, 4, 83, 27, 4, 58, 18,	7,1782 38,5 08 6,7 5 38,8 11180 8,7 2 38,8 2,5358 20,2	48. :	23.2 2108 1 4.88 1 25 4 31 	1.8 55. 1.8 55. 1.8 50.	23. 2 4 39 1813 7. 21 27. 8 30. 5 9 0118 .25 45 10. 8 18. 5 .24 .48		(+) SOUTHWARD F (-) NORTHWARD F	LOW LOW
	29. 23. 4. 41. 22 46. 21. 51. 22 2. 68. 20. 2. 61. 40. 6.	72, 2018 7 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	.8 42, .89	27 4 	39.0 92 3.00 44 3.30 3.30 30.0 43.25 35.8 11 10.14	48, 72, 4, 83, 23, 4, 58, 18, 10, 85, 21, 8,	7,1782 38,5 05 6,7 5,1180 38,8 03 8,7 2 38,8 25,555 20,2 28,8 24,7 15,0	48. : 0 54. : 4 08. :	23. 2 2108 2 2108 2 2 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1.6 50. 1.8 85. 1.01 1.8 80. 1.80	23.2 38.3 4 39 7.21 27.8 90.5 25.6 45 19.8 38.5 2.0122 48 19.8 38.7 2.0122 48 19.8 38.7 2.0124 9.02		(-) WORTHWARD F	LOW
	29. 23. 4. 41. 22 46. 21. 51. 22 2. 68. 20. 2. 61. 40. 6.	72, 2018 7 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	.8 42, .89	27 4 	39.0 92 3.00 44 3.30 3.30 30.0 43.25 35.8 11 10.14	48, 72, 4, 83, 23, 4, 58, 18, 10, 85, 21, 8,	7,1782 38,5 08 6,7 5 38,8 11180 8,7 2 38,8 2,5358 20,2	48. : 0 54. : 4 08. :	23. 2 2108 2 2108 2 2 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1.6 50. 1.8 85. 1.01 1.8 80. 1.80	23.2 38.3 4 39 7.21 27.8 90.5 25.6 45 19.8 38.5 2.0122 48 19.8 38.7 2.0122 48 19.8 38.7 2.0124 9.02		(+) SOUTHWARD F	C O W

FIGURE 70. Solenoid division of North Atlantic Standard Monitoring Section A6 including mean temperature, mean salinity, volume flow, heat and salt transport values from data of USCGC ROCKAWAY, 19–22 November 1966.

TABLE 1

Cruise No.	Shi	p	Date	No. of stations	NODC No.	U.S. Coast Guard Publication No.
		Section 1				
A1-1	USCGC EVERGREEN		07/25 - 07/26/65	12	31 - 549	373-12
A1-2	USCGC EVERGREEN			12	31-8001	373-13
		Section 2				
A2-1	USCGC HUMBOLDT		. 03/11-03/12/66	14	31 - 702	
A2-2	USCGC EVERGREEN		. 04/07-04/08/66	10	31-8001	373-13
A2-3	USCGC EVERGREEN		05/26-05/27/66	11	31-8001	373-13
A2-4	USCGC EVERGREEN		11/06-11/07/66	13	31-8007	
		Section β				
A3-1	USCGC MENDOTA		11/23-11/24/64	7	31 - 223	
A3-2	USCGC INGHAM		01/28-01/29/65	7	31 - 223	
A3-3	USCGC DUANE		02/14 - 02/15/66	11	31 - 792	
A3-4	USCGC HUMBOLDT		03/09-03/10/66	11	31 - 702	
A3-5	USCGC EVERGREEN		04/04-04/05/66	9	31 - 8001	373-13
A3-6	USCGC EVERGREEN		04/16-04/17/66	6	31 - 8001	373-13
A3-7	USCGC EVERGREEN		04/18-04/19/66	6	31 - 8001	373-13
A3-8	USCGC EVERGREEN		04/21/66	4	31 - 8001	373-13
A3-9	USCGC EVERGREEN		05/25 - 05/26/66	11	31 - 8001	373-13
A3-10	USCGC EVERGREEN		11/09-11/11/66	17	31 - 8007	
		Section 4				
A4-1	USCGC EVERGREEN		04/02-04/03/66	7	31-8001	373-13
A4-2	USCGC EVERGREEN		05/22-05/24/66	16	31 - 8001	373-13
A4-3	USCGC EVERGREEN		11/11-11/13/66	16	31-8007	
		Section 5				
A5-1	USCGC EVERGREEN		11/01-11/03/66	18	31 - 8007	
		$Section \ 6$				
A6-1	USCGC EVERGREEN		10/25-10/28/66	15	31 - 8007	
A6-2	USCGC ROCKAWAY		11/19-11/22/66	15	31 - 1061	

Table 2.—List of standard depths (meters) for electronically obtained serial data

0000	0100	0400	1000	1750	6000
0010	0125	0500	1100	2000	7000
0020	0150	0600	1200	2500	8000
0030	0200	0700	1300	3000	9000
0050	0250	0800	1400	4000	
0075	0300	0900	1500	5000	

Explanation of Oceanographic Station Data

Description of Entries, Units, and Codes on NODC Station Listing

1. Surface Observations

Entry	$Description\ of\ Field$
NODC REF. ID. NO	NODC reference identity number.
COUNTRY CODE	Indicates nationality of the institute or agency conducting the survey or expedition.
CRUISE NUMBER	A reference number assigned by NODC for storage-retrieval purposes. NODC Publication C-1. Reference Sources of Occanographic Station Data, gives complete bibliographic and other pertinent information for each cruise.
SHIP CODE	Alphabetic representation of ship's name (or ICES numeric ship code).
LATITUDE	Degrees, minutes, and tenths of minutes, N. or S.
LONGITUDE	Degrees, minutes, and tenths of minutes, E. or W.
DRIFT INDICATOR MARSDEN SQUARE:	The letter D appears in this column if extensive drift occurred while on station.
10°	Marsden square number according to the Marsden square system.
1°	The 1° square number according to the Marsden square system.
STATION TIME:	
(GMT)	Date and time given by the originator (GMT).
MONTH	Month (GMT).
DAY	Day (GMT).
HR. 1/10	GMT to nearest tenth of an hour.
YEAR	Year.
ORIGINATOR'S	Alphabetic or alpha-numeric designator as assigned by the originator. If the year of
CRUISE NUMBER.	the cruise forms part of the cruise numbering system, the year digits are found in preceding field.
STATION NUMBER	Originator's station number or designator.
DEPTH TO BOTTOM	Corrected or uncorrected sounding depth in meters.
MAX. DEPTH OF	Depth of deepest sample in hundreds of meters to nearest hundred-meter interval.
SAMPLES.	
WAVE OBSERVATIONS:	
DIR	Direction from which the dominant waves are coming, in tens of degrees, according to WMO Code 0885.
HGT	Height of dominant waves according to WMO Code 1555.
PER	Period of dominant waves according to WMO Code 3155.
SEA AMT	Sea amount (sea state) according to WMO Code 3700 (preceded by the letter A).
WEATHER CODE	If preceded by the letter X, weather according to WMO Code 4501. A numeric two-digit entry indicates weather according to WMO Code 4677.
*INSTR./CLOUD	This field is used either for recording instrument code when electronically obtained data are being reported, or for reporting cloud type and cloud amount when conventional Nansen east data are being reported.
*INSTR	A two character code representing instrument package of system.
TYPE	Cloud type according to WMO Code 0500.
AMT	Cloud amount according to WMO Code 2700.
NODC STATION	Assigned by NODC for data storage and retrieval purposes. The NODC Reference Identity
NUMBER.	and Station number combined, uniquely define each station in the NODC archives.
*DT/*S ^U / _D	This indicator specifies that the reported data have been obtained electronically rather than by Nansen-type casts. U (up) and D (down) are cast indicators for electronically obtained serial data and specify that the data were taken while hoisting or lowering respectively.
WATER COLOR	Water color according to Forel-Ule Code.
TRANS. (m)	Water transparency in meters as determined by Secchi disc.
DIR	Direction from which wind is blowing in tens of degrees, according to WMO Code 0877.
SPEED OR FORCE	If preceded by letter S, wind speed in knots; if preceded by letter F, wind force in Beaufort code.
BAROMETER (mbs)	Barometric pressure in millibars; tens, units, and tenths places only.

AIR TEMPERATURE °C:	
DRY BULB	Dry bulb air temperature in degrees centigrade, to tenths.
WET BULB	Wet bulb air temperature in degrees centigrade, to tenths.
VIS CODE	Visibility according to WMO Code 4300.
NUMBER OBS, LEVEL	The number of observed levels associated with the station.
SPECIAL OBSERVA-	Entries in this space vary with individual cruises or stations. Information concerning
TIONS.	entries in this field can be requested from the NODC.

2. A complete description of the codes can be found in NODC publication M-2 (Rev. August 1964), "Processing Physical and Chemical Data from Oceanographic Stations."

TABLE I. Observed and interpolated oceanographic data taken by USCGC MENDOTA, 23-24 November 1964, and USCGC INGHAM, 28-29 January 1965, on North Atlantic Standard Monitoring Section 3; prepared from NODC listing No. 31-223.

1/10				. 1	0.00	40 1 4 T C p. 15			MAX.				T .				1
	GITUDE E	MARSDEN SQUARE	STATION TIM	YEAR	CRUISE	STATION		DEPTH TO BOTTOM	OEPTH OF	OBSE	WAVE RVATIONS	WEA- THER CODE	COOES		S.	NODC	
	17 10		MO DAY HR.	05 1964	LC1 0	NUMBER O I	_	0052	S'MPL'S	-	GT PER SI	X 1	8 5		_	UMBER	
1		WAT			A ID	TEMP. C		NO.			-	1 ^ 1	0)		-	0001	I
		COLOR	TRANS. DIR.	OR MET	ER ORY	WET	CODE	OBS. DEPTHS	SPEC OBSERVA	ZNOIT							
		-		519 25			7	03		$\overline{}$							
CARO					SPECIFIC VO	ILUME 3	Δο	SOU	NO.		PO amp	TOTALER	NON	NO.=N	51051		5
TYPE	DEPTH (m)	1 6	\$ -4.	SIGMA -T	ANOMALY.	-x10?	x 10 ³			D ₂ ml/li	μg = α1/1	μg = αt/1	μg = α1/1	1/40 - gu	μg - α1/I	pН	c
																	T
					00201	.04 (0000										
STD	0010	0479	3284	2601	00200	63 (020										
STD	0020	0478	3285	2602	00200	15 (040										
STD	0030	0478	3287	2605	00196	84 (060										
STD	0050	0347	3304	2630	00173												
OBS	0050	0347	33038	2630				14,	528								
	1 -	44.405.DEN	STATION TIA		T ORIG	2º9OTANI			MAX.		A/ A 1/5		CLOUD				1
		SQUARE	(GMT)	YEAR	CRUISE	STATION		TO	OF	OBSE	PVATIONS	THER	CODES]	\$	TATION	
1/10 15.NL 0.4	1/10						-					-		Ť			
314 04	722 N			ND I	A 19						4	XI	1 4	ŧ	ļ	0004	
		COLOR	TRANS, CIR	SPEED MET	ER DRY	WET	VIS.	OBS.	SPEC OBSERVA	TIONS							
		COOE	1m I	FORCE (mb)													
			130	314 20								Ĭ					Τ.
CARO	OEPTH (m)	t "C	5 %.	SIGMA-T	SPECIFIC VO	1107 C	YN. M.			O 2 ml/1	PO4-P	FO7AL-F ug - al/l	NO2-N vg - o1/1	NO3-N	\$1 O4-\$1 yg - 01/1	pН	S
	<u> </u>					-	X 1U-	+				-		70			+
STD	0000	0482	3283	2600	00201	.87 (0000	14	674			1	1				1
OBS	0000	0482	32827	2600	00301				-								
OBS	0025	0478	32826	2600				14									
STD				2605													
OBS	0054	0238	33189	2652	00161	190 (1046										
DE 101	STUDE ES	MARSDEN						DEPTH	MAX. OSPTH							NODC	
1/10	1/10				NO.				OF S'MPL'S			CODE	TYPE AM	1			
5N 04	855 W	149 48	11 24 0	19 1964	LC1 C	003		0344	03	28	2	X 1	7 4			0003	
				BAR	0+	T	vis.	NO.									
		CODE	TRANS. DIR.	OR MILE		BULB	CODE		OBSERVA	SHOIT							
			26	508 26	0 017	7 -01:	1 7	08									
								1								7	5
CARO	DEPTH (m)	T *C	5 %	SIGMA-T	SPECIFIC VO	LUME E	YN. M.	200		O 2 ml/l	PO4-P	TOTAL-P	NO2-N	NO3-N	\$104-51	он	10
CARO TYPE	DEPTH (m)	J €	5 %.	SIGMA-T	ANOMALY-	X102	∑ 0 x 10 ³	VETO 200		O 2 ml/l	PO4-P ug - q1/1	1014L-P	NO2-N ug - 01/1	NO3-N pg - 01/1	\$1 O4~\$1 yg - o1/1	рН	C
TYPE		T *C		SIGMA-T		_X10?	E △ 0 YN, M. x 10 ³			D ₂ ml/l						pH	ic.
	0000 0000	T *C	3343 33430	SIGMA-T		DLUME C	E A O SYN, M. x 10 ³			O ₂ ml/l						pН	C
STD OBS STD	0000 0000 0010	T *C	3343 33430 3343	SIGMA-T		NUME 2 -x10?	E A O DYN, M. x 10 ³			O ₂ ml/l						рН	100
STD OBS STD STD	0000 0000 0010 0020	2 1	3343 33430 3343 3343	SIGMA-T		X107	E A O YN, M. x 10 ³			O 2 mI/I						рН	100
STD OBS STD	0000 0000 0010	7 °C	3343 33430 3343	SIGMA-T		LX10?	E ∆ O DYN, M. x 10 ³			D ₂ mI/I						рН	Te de la constant de
STD OBS STD STD OBS STO OBS	0000 0000 0010 0020 0025 0030 0044	0124	3343 33430 3343 3343 33433 3359 33934	2720	ANOMALT		E A O YN, M. x 10 ³	14	542	D ₂ ml/l						рН	ic i
STD OBS STD STD OBS STO OBS STO	0000 0000 0010 0020 0025 0030 0044 0050	0124	3343 33430 3343 3343 33433 3359 33934	2720 2723			E △ O YN, M. x 10 ³	14	CITY	O ₂ ml/1						рН	CC
STO OBS STO OBS STO OBS STO OBS STO OBS STO	0000 0000 0010 0020 0025 0030 0044 0050 0068	0124 0128 0141 0146	3343 33430 3343 3343 3343 3359 33934 3398 3340Q 3414	2720 2723 26760 2735	ANOMALT	504	E A O PYN, M. x 10 ³	14 14	542 545 559	O2 ml/1						рН	
STO OBS STD OBS STO OBS STO OBS STO OBS	0000 0000 0010 0020 0025 0030 0044 0050 0068 0075	0124 0128 0141 0146 0157	3343 33430 3343 3343 33433 3359 33934 3390 3414 34216	2720 2723 26760 2735 2740	00085 00074	504 +17	E Δ Ο ΣΥΝ, Μ. x 10 ³	14 14 14	542 545 559 568	O2 ml/1						pH	
STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD	0000 0000 0010 0020 0025 0030 0044 0050 0068 0075 0091 0100	0124 0128 0141 0146 0157 0162	3343 33430 3343 3343 33433 3359 33934 3398 3340Q 3414 34216 3423	2720 2723 26760 2735 2740 2741	00085 00074	604 +17	E △ O SYN, M. x 10 ³	14 14 14 14 14	542 545 559 568 572	O 2 ml/l						рМ	
STD OBS STD OBS STD OBS STO OBS STO OBS STD OBS STD OBS STD OBS STD OBS STD OBS	0000 0000 0010 0020 0025 0030 0044 0050 0068 0075 0091 0100 0125 0139	0124 0128 0141 0146 0157 0162 0174 0181	3343 33430 3343 3343 33433 3359 33934 3398 33400 3414 34216 3423 3426 34276	2720 2723 26760 2735 2740 2741 2742 2743	00085 00074	604 +17 354 722	E Δ Ο ΣΥΝ, Μ. Σ 10 ³	14 14 14 14 14 14	542 545 545 559 568 572 582 587	O 2 ml/l						рМ	CC
STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD STD OBS STD OBS STD	0000 0000 0010 0020 0025 0030 0044 0050 0068 0075 0091 0100 0125 0139	0124 0128 0141 0146 0157 0162 0174 0181	3343 3343 3343 3343 3343 3359 33934 3398 33404 34216 3423 3426 3423	2720 2723 26760 2735 2740 2741 2742 2743 2743	00085 00074	604 +17 354 722	€ △ O	14 14 14 14 14 14 14 14	542 545 559 568 572 582 587 591	O 2 ml/l						ρМ	CC
STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS	0000 0000 0010 0025 0030 0044 0050 0068 0075 0091 0100 0125 0139 0150	0124 0128 0141 0146 0157 0162 0174 0181 0186	3343 3343 3343 3343 3343 3359 33934 3398 3394 3414 3421 3426 34276 3428 34303	2720 2723 26760 2735 2740 2741 2742 2743 2743 2743	00085 00074 00066 00067	604 +17 354 722	€ Δ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14 14 14 14 14 14 14 14 14	542 545 559 568 572 587 591 605	O 2 ml/l						рМ	CC
STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD STD OBS STD OBS STD	0000 0000 0010 0020 0025 0030 0044 0050 0068 0075 0091 0100 0125 0139	0124 0128 0141 0146 0157 0162 0174 0181	3343 3343 3343 3343 3343 3359 33934 3398 33404 34216 3423 3426 3423	2720 2723 26760 2735 2740 2741 2742 2743 2743	00085 00074	504 +17 354 722 570	€ Δ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14 14 14 14 14 14 14 14 14 14	542 545 559 568 572 582 587 591	O 2 ml/l						рН	CC
3	STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS STD OBS	STD 0000 OBS 0000 STD 0010 STD 0020 OBS 0050 OBS O050 OD54 OD55 O055 O055 O055 OD55 O	STD 0000 0479 STD 0010 0479 STD 0010 0479 STD 0020 0478 STD 0030 0462 STD 0050 0347 OBS 0050 0347 OBS 0050 0347 OBS 0050 0347 OBS 0050 0347 OBS 0050 0347 OBS 0050 0347 OBS 0050 0347 OBS 0050 0347 OBS 0050 0347 OBS 0050 0347 OBS 0050 0347 OBS 0050 0347 OBS 0050 0347 OBS 0050 0479 OBS 0050 0479 OBS 0050 0482 OBS 0050 0482 OBS 0050 0482 OBS 0050 0480 OBS ODS 0479 OBS 0055 0478 OBS 0054 0238 OBS 0054 0238 OBS 0054 0238 OBS 0054 0238 OBS 0054 0238 OBS 0054 0238 OBS ODS	STD 0000 0479 3283 3285 3	STD 0000	STD 0000	STD 0000 0479 3283 2601 0020104 0085 0000 0479 32834 2601 0020063 0085 0020 0478 3285 2602 0020015 0085 0025 0478 3285 2602 0020015 0085 0025 0478 3285 2602 0020015 0085 0025 0478 3285 2602 0020015 0085 0050 0347 3304 2630 0017330 0085 0050 0347 3304 2630 0017330 0085 0050 0347 33038 2630 0017330 0085 0050 0347 33038 2630 0017330 0085 0050 0347 33038 2630 0017330 0085 0050 0347 33038 2630 0017330 0085 0050 0485 0050 00	STD 0000 0479 3283 2601 0020104 0000	STD 0000 0479 3283 2601 0020104 0000 14,	STD 0000 0479 3283 2601 0020104 0000 14673 085 0000 0479 32834 2601 0020063 0020 14674 14676 3510 0010 0479 3284 2601 0020063 0020 14674 14676 085 0025 0478 3285 2602 0020015 0040 14676 085 0025 0478 3285 2602 0020015 0040 14676 085 0025 0478 3285 2602 0020015 0040 14676 085 0030 0462 3287 2605 0019684 0060 14671 085 0050 0347 3304 2630 0017330 0097 14628 085 0050 0347 3304 2630 0017330 0097 14628 085 0050 0347 3304 2630 0017330 0097 14628 085 0050 0347 33038 2630 0017330 0097 14628 085 0050 0347 33038 2630 037330 0097 14628 085 0050 0347 33038 2630 037330 0097 0095 0097 0097 0097 0097 0097 0097 097	STD 0000 0479 3283 2601 0020104 0000 14673	STD 0000 0479 3283 2601 0020104 0000 14673 14673 14673 14673 1570 0010 0479 32834 2601 0020063 0020 14674 14676 1467	STD 0000 0479 3283 2601 0020104 0000 14673 14674 1	STD 0000 0479 3283 2601 0020104 0000 14673 14673 14673 14673 1510 0010 0479 3283 2601 0020063 0020 14674 14676 085 0025 0478 3285 2602 0020015 0040 14676 14676 085 0025 0478 3285 2602 0020015 0040 14676 14676 085 0025 0478 3285 2602 0020015 0040 14671 0085 0085 0095 00347 3304 2630 0017330 0097 14628 0085 0095 00347 3304 2630 0017330 0097 14628 0085 0095 00347 3304 2630 0017330 0097 14628 0085 0095	STD 0000 0479 3283 2601 0020104 0000 14673 14673 14675 14676 1	STD 0000 0479 3283 2601 0020104 0000 14673 14674 14676 1	STD 0000 0479 3283 2601 0020104 0000 14673 14678 1

RENCE	SHIP	LATITU	JDE	LON	MOLITOR BOOK	M AR SQU			ON TIA		EAR	CRUISE	ORIGIN	ATOR'S	\equiv	OEPTH TO	MAX		WAVE	ons	WEA				NODC
ID.	CODE	,	1/10	.01	1/10	10*			AY HR			NO.		UMBER		801TOM	S'MPL	S DIR.	HGT PER	TSEA	CODE				NUMBER
22	3 ME	443		04	841 W	149	1				964	LCI	00	4		2195			1		×1	7	1		000
	-1						WA			ND I	BARC	-	AIR TEA			NO.			-		1 // 1	, , .	-	'	000
							COLOR		DIR.	SPEED	METE	2 0	ORY	WET	CODE	0.05	OBSTON	CIAL VATIONS							
							CODE	lm1	\rightarrow	FORCE	(mbs	-	ULB	BULB	+										
		,				-		4	26	508	28	0 0	11	-011	7	1 4	L		-				_	_	_
	MESSENGR TIME o	CAST NO.	CAT		DEPTH (m)	T	70	s	٠/	SIGMA	-1	SPECIFIC	ALT-I	ME D	∆ D rN. M. k 10 ³	VEL	OCITY	O 2 ml/l	PO4-		OTA (- P ا/اه - وبر	NO2-1			
	1		\$	TD	0000	C	1446	34	15	270	9	000	984	2 0	000	14	677		'						
	047	7	08	_	0000		1446		154	270						14	677								
				TD	0010		1453	34		270			986		010		681								
				TD	0020		1460	34		270		000	988	0 0	020		686								
	047	7	08		0024		1462		174	270							687								
		_		TD	0030		1469	342		271		000	976	8 0	030		692								
	047	7	08		0049		1473	343		271							698								
		_		TΟ	0050		471	343		272		000	883	5 0	048		697								
	0 4 7	7	ОВ	_	0074		1435	345		274					_		689								
				TD	0075		434	345		274		000	689	4 0	068		689								
	0 4 7	7	08		0098		409	346	_	275							684								
				TD	0100	-	407	346		275			566		084		684								
	0.43			TD	0125		392	347		276		000	1508	/ 3	097		682								
	047	f	08		0147		382	347		276		000			100		682								
	0 4 7		0 B	TD	0150 0197		382	347		276		000	470	9 0	109		683								
	047			5 TD	0200		375	348		276		000			1 7 7		688								
				TD.	0200		366	348		276			0 ق 4 (132		689								
	047	7	0B		T0297		364	348		277		000	1426	3 (153		693								
	04/			TD.	0300		365	348		277		000	17. (3.7	2 0	174		700								
				TD	0400		383	349		277	_		140 7 1388		214		701								
	047	,	0 B		0400		383	349		277		000	1008	0 0	-14		726								
	041			TD.	0500		373	349		277		000	394	2 0	453		738								
				TO	0600		364	348		277			1399		293		751								
	047	,	08		0606		363	348		277	_	000	,,,,,	د ن	273		752								
	0			TD	0700		360	348		277		0.00	404	6 0	333		766								
				TD	0800		357	348		277			410		374		781								
	053	3	08		10897		354	348		277		000	,	, ,	- 14		796								
				TD	0900		354	348	_	277		0.00	415	4 0	415		797								
			_	TO.	1000		351	348		277			420		457		812								
				TD	1100		349	348		277			425		499		828								
	053		08		1122		348	348		277		000	, + 2)	. 0	2 7 7	14	0 6 0								

					_																
REFERENCE	SHIP			Situde #8	MARSE		STATION TO			ORIGIN	ATOR'S	_	DEPTH	AAX. EPTH		WAVE RVATIONS	WEA-	CLOUD			NODC
CODE NO.	CODE	LATITUDE 1/10	LONG	1/10	10"		MQ DAY HI		AR		STATION NUMBER		0077044	OF MPL'S		HGT PER SE	THER	TYPE AM	-		UMBER
31 223	ME 4	4423 N	047	57 W	149	- +			64	LC1 00		_		12	28	2	x1	5 5	+		0005
,	, ,	'		' '	L,	WAT	ER W	IND.	BARO-	A ID TE			NO.		—¬'	- 1 1	,		,		0000
						OLOR		SPEED	METER	DRY	WET	VIS.	0.00	SPECI SERVA							
						CODE	(m)	FORCE	(mbs)	BULB	BULS										
							30	S05	280	011	-017	7	13								
	MESSENGE TIME OF HR 1/10	CAST CAP		DEPTH (m)	7	°c	s */	SIGMA-	-1	SPECIFIC VOLU	in? DIN	1. M. 10 ³	SOUND) 2 m1/l	PO4-P	101AL-P pg = 01/1	NO2-N ug - at/3	ND3-N µg - a1/I	SI D4-Si µg - al/L	рН
												-	1								
	'	s	TD	0000	07	40	3337	2610) '	001920	8 00	00	1478	35		1		'		1	'
	088	08		0000	0.7	40	33367	2610)				1478	35							
		S	TO	0010	07	40	3337	2610)	001922	8 00	19	1478	3 7							
			TD	0020	0.7	41	3337	2610)	001925	6 00	38	1478	88							
	088	OB		0024	_	41	33366	2610)				1478	9							
			TD	0030		41	3337	2610)	001927	77 00	158	1479	90							
	088	08	-	0049		42	33364	2609					1479								
			TD	0050		29	3341	2615		001881	.6 00	96									
	088	08		0074		60	34189	2698					1473								
		_	TO	0075		67	3421	2699		001084	4 01	33									
	088	08		0098		87	34567	2712					1479								
			TD	0100		88	3458	2713		000962		.58									
	0.00		TO	0125		94	3469	2720		000893	15 01	82									
	088	08	S TD	0148 0150		95	34760 3476	2725 2726		000846	0 03	03	1481								
	088	0B		0198		99	34764	2739		000046	08 02	. 0 3	1478	-							
	000		10	0200		95	3476	2739		000721	5 0/	43									
		_	10	0250		20	3477	2749		000629		76									
	088	οB		T0297		79	34783	2755		00002	, ,	. , 0	1474								
			T D	0300	_	79	3479	2755		000575	9 03	07									
	088	ОВ		0398	0.4	85	34935	2766					1476								
			TD	0400	0.4	85	3494	2767		000481	8 03	159									
		S	TO	0500	0.4	65	3496	2771		000455		06									
		S	TD	0600	0 4	45	3497	2774		000439	2 04	51	1478	36							
	088	08	S	0601	0.4	45	34972	2774					1478	36							
		S	TO	0700	0.4	31	3497	2775	5	000428	8 04	94	1479	7							
		S	TD	0800	04	17	3497	2777	7	000422	2 00	37	1480	8 (
	088	OB		T0805		16	34968	2777					1480	8 (
			TO:	0900		99	3495	2777		000429		79									
			TO	1000		84	3494	2778		00042	37 06	21									
	088	0B:	-	1010		83	34938	2778					1482								
		_	TO	1100		74	3493	2778		000427		64	1483								
			TD	1200	0.3		3493	2779		000427	9 07	07	1485								
	088	0B:	S	T1215	0 3	66	34928	2779	1				1485	5							

NCE ID.	SHIP	LATITU	OE .	101	4GITU'DE	DRIFT	MAR!	SDEN APE	STATIO	N TIME		YEAR	CRUISE	ORIGINA ST	TOR'S	DEPT	DEPT		WAVE SERVATI	ONS	WEA	CODES		S	NODC TATION
NO.	CODE	•	1/10		17/10	o z	10*	1.	MO DA	Y HR.1	/10		NO.		UMBER	BOTTO	M S'MPL	-S DIR.	HGT PE	R SEA	CODE	TYPE AM	T	N	UMBER
223	ME	4416	N	04	7205W		149	47	11 24	12	2 1	964	LCl	006	5	379	5 12	28	2		X1	7 7			0006
								WA	I É R	WIN	D	BARC		AIR TEM		NO.		ECIAL]						
								COLOR	TRANS (DIR.	PEED OR ORCE	METE (mbs	R I	ORY ULB	WET CO	DEPTH	CACCO	VATIONS							
										28 5	05	300	0	22	-011 7	13									
	MESSENG TIME HR 1/10	Y NO.	CAF		DEPTH	lm I	т	*c	5 .	٠. ا	SIGM	A - T		VOLUA		M. 1	OUND	O2 m1/	PO4		OTA L P ug • mr/f	NO2-N ug - al/l	NO3-N µg - a1/l	SI O4-Si µg - 01/I	рН
	1		S	TD	000	0	0	718	3349	9	262	3	001	8015	000	0 1	4778		'				,	,	
	12	2	08:	S	000	0	0	718	3348	8.8	262	3				1	4778								
			S	T D	001			719	3350)	262		001	7950	001	8 1	4780								
				TD	002			721	335		262		001	7877	7 003	6 1	4782								
	12	ر 2	OB:		002			721	335		262						4783								
		-	_	TD	003			605	3355		264		001	6174	005	1 ا	4739								
	12	2	08		004			456	3379		267						4683								
		-		TD	005			469	3386		268		001	2340	008		4690								
	12	2	OB:		007			557	343		271		0.00	0336			4737								
	12	7	OB:	T D	007			589	3446		271		000	9239	010		4752								
	12	2		5 TD	010			660 641	3469		272		000	6330	012		4786								
				TD	012			587	347		273			7266			4780 4763								
	12	2	08:		013			562	347		274		000	1200	014		4755								
	12	_		T D	015			540	347	-	274		000	6734	016		4748								
	12	2	08:		018			492	347		274		000	01	. 010		4734								
				T D	020			490	3475		275		000	6067	7 019		4736								
				TD	025			480	3482		275			5487			4741								
	12	2	08	S	T027	6	0	473	3484		276						4742								
			S	TD	030	0	0	463	3486		276		000	5052	025		4742								
	12.	2	0 B	S	036	9	0	439	3489	91	276	8				1	4744								
			S	TD	040	0		433	3490)	276	9	000	4523	0.50	2 1	4747								
				TΟ	050	0	0	414	349	l	277	2	000	4337	7 054	6 1	4756								
	12	2	OB:	S	055	3		405	349	19	277	4				1	4761								
				τD	060			398	3492	2	277		000	4202	038	9 1	4766								
				T D	070			385	349		277	15	000	4170	043	1 1	4717								
	12.	2	0B:		T074			380	349		277						4782								
				T D	080			375	3491		277			4176	-		4789								
		_		T D	090			367	349		277		000	4171	051		4802								
	12.	2	089		094			365	3490		277						4809								
				TD	100			363	349		277			4209			4817								
		2		TD	110			361	3492		277		000	4196	0>9		4833								
	12.	2	08;	S	1115	4	0	361	3492	24	277	9				1	4842								

ID.	SHIP	LATITUE)E LC	NOCET 1/10	MARSD SOUAF	E	STATION TIN	YEAR	ORIGII CRUISE NO.	NATOR'S STATION NUMBER		DEPTH TO BOTTOM	DEPTH DF S'MPL'	08		WAVE ERVATIONS HGT PER SEA		CLOUD CODES		5	NODC TATION IUMBER
22:	3 ME	44085	N 04	46415W	149	46	11 24 1	57 1964	LC1 00	7		3840	13	29	2		X 1	8 3			0007
	- 1					WAT		IND BAR	A ID YE	MP. ℃		NO.	1							1	0001
					c	OLOR	TRANS. DIR.	SPEED MET	ER DRY	WET	CODE	OBS. DEPTHS		CIAL VATIONS							
					C	ODE	IM I	FORCE (mb		BULB											
							31	505 28	0 028	000	7	13									
	MESSENGA TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	1 .	*c	s ·/	SIGMA-T	SPECIFIC VOL	107 0	₹ △ D DYN. M. x 10 ³		LOCITY	0 2 ml/l	PO 4-		OTAL-P ug - 01/I	NO2=N µg = at/l	NO3=N µg - at/1	\$1 D4~\$1 µg = 01/1	рН
	1											1	- 1							İ	
			STD	0000	08		3330	2592	002096	+2 0	000		818								
	157	7	OBS	0000	0.8		33297	2592					818								
			STD	0010	08		3329	2593	002080		021		814								
			STD	0020	07		3329	2595	002062	25 0	042		810								
	157	1	OBS	0026 0030	07 07		33287 3329	2597 2599	002034	. 5 0	062		807 803								
			STD	0050	07		3340	2614	002034	-	101		789								
	157	7	085	0053	07		33433	2614	001889	74 0	101		787								
	10	'	STD	0075	04		3385	2683	001239	55 0	140		691								
	157	7	OBS	0079	04		3 3 9 2 7	2691					685								
	• • •		STD	0100	05		3438	2717	000916	51 0	167		730								
	157	7	OBS	0104	05		34439	2721			-		736								
			STD	0125	05	36	3451	2727	000830	0 0	189	14	739								
			STD	0150	05	27	3458	2733	000770	3 0	209	14	740								
	157	7	OBS	0157	05	24	34593	2735				14	740								
			SID	0200	04	95	3466	2743	000679	96 0	445	14	736								
	157	7	OBS	0210	04		34673	2745					736								
			STD	0250	04		3476	2752	000598		277		741								
			STD	0300	04		3484	2760	000536	0 2	306		748								
	157	7	OBS	T0315	04		34860	2761	0031:-				750								
	167	,	STD	0400	04		3493	2768	000467	15 0	356		761								
	157	′	OBS	0422	04		34945	2770	000/36		4.01		763								
			STD	0500 0600	04 04		3493 3492	2772 2774	000438		401 444		763 767								
	157	,	OBS	0634	03		34913	2774	00042	ں د	- 44		770								
	121		SID	0700	03		3492	2775	000420	18 0	486		778								
			STD	0800	03		3492	2776	000420		>28		793								
	157	7	OBS	10848	03		34920	2776	300 720		- 20		799								
			STD	0900	03		3492	2777	000421	17 0	570		807								
			STO	1000	03		3492	2777	000424		613		822								
	157	7	085	1064	03		34924	2778	-				831								
			STD	1100	0.3	68	3492	2778	000428	90 0	655	14	836								
			STD	1200	03	61	3492	2778	00042	79 0	698	14	850								
		7	OBS	T1280	03		34913	2779				3.4	860								

ID.	SHIP CODE	LATITUDE		LON	IGITUDE SOUTH	M A R SQU	SOEN	(ION TI	YEAR	YEAR	CRUI			ON	OEPTH TD BOTTON	MAX. DEPTH	J 00.	WAVE SERVATIONS		WEA- THER CODE	CLOUD		5	NODC FATION UMBER	
NO.			1/10		11/10 ° Z		1*	MD [H YAC	2.1/10		NO	!	NUMBER		801108	S'MPL"	S DIR.	HGT PE	HGT PER SEA		TYPE AM	1		UMBEK	
223	IN	4408	N	04	638 W	149	46	01 2	28 1	64	1965	LC	2 00	1		3860	12	14	2		X2	5 8)	-	0032	
	, ,			'			WAT	ER	W	IND	BAR	0.	AIR TE	MP.		NO.	T							•	0032	
							COLOR	R TRANS. OIR.	OIR.	SPEED OR FORCE	R	ER	ORY BULB		WET COD	200	SPECIAL DBSERVATIONS									
									16	515	03	0	106	10	00 6	13										
							1	1				$\overline{}$				<u> </u>	1			- 1						\neg
	MESSENGE TIME	CAST NO.	CA		DEPTH (m)	T	~	s */		SIGMA-T		SPECIFIC VOLUME ANOMALY-1107			₹ ∆ D	. 50	OUND O2 1		ni/3 PO4-P		OTA L-P	NO2-N	NO3-N	\$1 04-51		ç
	HR 1/10		,,,	F 4											x 103	V	LOCIII		μg = a1/l	8171	µg - 01/1	µg - o1/	µg = at/l	μg - α1/l		c
																			1	- 1						
	1	,	STD OBS STD		0000	0	640	3375		26	2654		0015036		0000	14	14750		•							,
	164	4			0000	0	0640		33754		2654					14	14750									
					0010		638	33	75	26	54	00	15048	8	0U15	14	751									
				TD	0020		635	3375		2654		0015031		1	0030	14752										
	164	4	OBS				634			2654							752									
			STD		0030		634	3375		2655		0015013		3	0045		753									
	164	4	OBS		0046	0639					55						756									
				STD 0050			696			2667		001383		5 007			784									
	164	164		OBS O			833	_	728	2703							850									
			_	STD 0075			779	3467		27		0010170		Ū	0104		829									
	164	' +	STD 0100		0091	0672			562	2713							789									
							671	3461			2717		0009182		0128		790									
	1.7			TD	0125		667	34	-	27		00	0835	2	0150		794									
	164	+	OBS 0137			665	34758		2730		0007/01					796										
	164				0150 0184		642 595			2735 2745		0007621		1	0170		789									
	104	+		STD 0200			595	3487		2748 2756		0006425 0005686		_	0.705		777									
			_	STD 0250			584								0405		780									
	164			08S 0278			569	34980			2760		0000	0	0235		785									
	10-	•		STD 0300			544			2762		0005184		/.	0263		14784 14777									
	164		-	OBS 037			0477 34933		2767		0000104		4	0203	14761											
	10	101		STD 0400			468			2769		0004624		4	0312		762									
				STD 0500			3494					0004374			0357		766									
	164	4	OBS		T0571			349		27		•			0-51		770									
				TO	0600		413	349	_	27		0.0	0420	1	0400		772									
				STD 0703			396	3493		2776					0441		782									
	164	4		085 0779			385	34926		2776		0004177		,	0 .41		790									
			STD 0800 STD 0900 085 0992		_		383	3492 3490		2776		0.0	0419	3	0483		793									
							376			27			0434		0526		806									
	164	4					370			2775		00	J - J -	_	5720		819									
				TD	1000		370	348		27		0.0	0447	6	0>70		820									
				TD	1100		365	348		27			0450		0615		835									
				TD	1200		362	348		27			0456		0660		850									
	164	•	ОВ	S	T1210		362	348		27							852									

REFERENCE					- E	MARSO		STATION TI			ORIG	NATOR	's	DEPTH	MAX.	1	WAVE	WEA			NODC
	CODE	LATITU	DE	LONGITUDE	DRIFT	SQUA		MO DAY H		YEAR	CRUISE NO.	STATE		10 MOTTOR	OF S'MPL"	003	ERVATIONS	COD6	TYPE AM	}	TATION IUMBER
31 223	IN	4415		047165W	1	149	-			965	LC2 0) 2		3705	13	09	2	. K8	716	1	0033
	'				, ,	Ċ	WAT		IND	BARC	A ID T	EMP.	VIS.	NO.		CIAL					
							CODE	TRANS. OIR.	OR FORCE	M ETS (mbs		8U	T COD	OBS. DEPTHS	OBSERV						
								16	\$23	00	0 100	10	00 6	13							
	MESSENGR TIME HR 1/10	I NO.	CARC		(m)	ī	*c	s */	SIGM	A-T	SPECIFIC VOI		₹ △ 0 0YN. M x 10 ³	SOL VELO	DCITY	0 2 ml/l	PO4=P µg = 01/1	TOTAL-P		NO3-N yg - at/l	рн
	2.24		ST				20	3388	266		00138	79	0000		744						
	223	,	OBS				50	33876 3390	266		00140	77	0.116		744 758						
			ST ST	-			79	3404	266		00140		0014		773						
	22:	a	085				82	34067	267		00154	2 5	0020		775						
			ST				333	3444	268		00125	73	0041		839						
	22:	3	OBS				28	34684	268						880						
			ST	0 009	0.6	09	32	3470	268		00121	81	0065	14	883						
	22:	3	085	009	9	0 9	34	34728	268	7				14	885						
			ST	D 007	75	0.9	29	3479	269	3	00115	15	0095	14	887						
	22:	3	OBS					34809													
			ST	0 010	0	0.9	20	3493	270	15	00103	95	0122	14	890						
	22:	3	085					34987													
			ST				12	3498	271		00099		0148		892						
			ST				903	3495	270		00100	83	0173		892						
	22	3	085				398	34931	270						892						
			ST				769	3488	272		00086		0220		849						
	22	3	ST OBS				39 524	3481 34794	273		00075	20	0460		805 800						
	22.	,					505	3489	274		00065	7. 2	0296		801						
	22	2	S T 0 B S				575	34981	279		00000	43	02 40		799						
	22	,	ST			-	641	3498	276		00052	a z	0354		793						
			ST				74	3497	277		00045		0403		781						
	223	3	OBS				36	34962	277		,,,,		3.93		778						
		-	ST				28	3496	277		00042	3.2	0447		779						
			ST				103	3495	27		00041		0489		785						
			5 T		00	0 3	86	3493	27		00041		0531	14	794						
	22:	3	OBS	080)6	03	885	34930	27	7					795						
			ST	D 090	0 (0 2	383	3493	27	7 7	00041	94	0572	14	809						
			ST		0.0	0.	380	3494	27		00042	26	0615		845						
	22	3	OBS			0	378	34936	271						832						
			ST				376	3494	27		00042		0657		540						
			ST				371	3494	27		00042	76	0700	14	855						
	22	3	085	T129	92	U :	300	34937	27	79				14	866						

FERENCE	SHIP	LATITU	OF	LONG	ITUDE	CTR.	MARS	OEN ARE		N TIM		YEAR .		GINAT		\Box	DEPTH	DEPTH		W.A	A VE	WEA-	CLOUD			NODO
10. NO.	CODE	•	1/10		1/10	INDCT	10*			Y HR.			NO.	ST.A NU	TION		BOTTOM	S'MPL			F PER SEA	CODE	TYPE AM			NUMBE
1 22	3 IN	4422	5N	0479	575W	П	149	47	01 2	9 02	23 1	965	LC2	003			3318	15		\top		λ5	7 6			003
							[WA	TÉR	WI	ND	BARO	AIR	TEMP	. 'c	_	NO.	,		٦' -	' '	1 70	1 1.0	1	'	00.
								COLOR	TRANS.	DIR. 1	SPEED	METER (mbs)			W ET	COD!	0.07		CIAL /A RONS							
							ŀ		-	$\overline{}$	S15	040			028	7	13			1						
	MESSENGR	T								1	-	-			7	<u> </u>				4	T					1
	TIME HR 1/10	g NO.	CAR		OEPTH !	(m)	ī	°C	2 .	٠٠	SIGM	A -T	SPECIFIC V	OLUM8	OY!	∆ p N. M 10³	. AEFO	DCITY	O 2 ml/			OTAL→P µg • ot/l	NO2-N µg - 01/1	NO3-N pg - 01/l	\$1 04-5 \10 - 84	
														-						\top						
	1		ST	0 '	0000	' ۵	0 6	506	339	ο ΄	267	0 '	0013	508	00	000	14	739		ı				,	*	'
	023	3	085	,	0000	0	O t	606	339	U3	267	0					14	739								
			51	D	0010	0	0.6	507	339	1	267	0	0013	515	0.0	14	14	741								
			ST	D	0021	Ú	O e	509	339	1	267	0	0013	523		27		743								
	0.23	3	085	5	002	9	0.6	510	339	1 i	267	0					14	745								
			ST	D	0030	0	0 (524	339	4	267	1	0013	490	0.0	41	14	751								
	023	3	OBS		0046	5	0.1	308	343	63	267	8					14	832								
			ST		005			830	344	0	267	8	0012	863	00	67	14	841								
			ST		007		-	945	346	6	268	0	0012	732	UC	199	14	892								
	0.23	3	085		0084			975	347		268						14	905								
			ST		0100		0 (941	35 Ú	0	270	7	0010	207	01	28	14	899								
	023	3	OBS		011.				351																	
			ST		012			391	351		272		0008		0.1	51	14.	886								
			ST		0150		0.1	343	351		273	3	0007	853	01	. 71	14.	872								
	023	3	OBS		0169				351																	
			ST		0200			754	350		273		0007	362	0.4	09	14.	845								
	0.23	3	085		0220			712	349	-	274						14.	832								
			ST		0250			576	349		274		0000	772	02	45	14:	824								
			ST		0300			507	349		275		0005	945	0.2	76	14	803								
	0 2 3	3	085		0339			558	349		276							789								
	0.7-		ST		0400			+87	349		276	-	0004	346	03	30		770								
	023	5	085		0456			+36	349		277							758								
			ST		0500			+23	349		277		0004		-	77		759								
	0.22		ST		0600			399	349		277		0004	220	04	20		766								
	023	•	OBS		10691			384	349		277							770								
			ST		0700			384	349.		277		0004			62		776								
			ST		0800			383	349.		277		0004			03		793								
	0.30		ST		0900			83	349		277		0004	129	05	44		809								
	023		085		0960			882	349		277						148									
			ST		1000			379	349		277		0004			86	146									
			ST		1100			171	349		277		0004		00		148									
	0.23		51		1200			365	349		277		0004	239	06	69		852								
	023		085		1221			364	349	-	277						148									
			ST		1300			300	349.		278		0004		07		148									
	023		ST 0BS		1400			357	3494		278		0004	: 76	07	55	148									
	023		005	,	1484	•	0.5	355	349	33	278	U					148	396								

FFERENC		SHIP CODE	LATITUE	DE 1/10	LONGITUOE	DRIFT	MARS SQUA	ARE	(G	N TIME MTI Y HR,1/1	YEAR		ATOR'S TATION IUMBER		10	MAX. OEPTH OF S'MPL'S	085		E TIONS	WEA THER CODI	CODE	S	S .	NODC TATION LUMBER
31 2	2 3	IN	4432	N	04840 #		149		01 29		1965	LC2 00	<i>(</i> ,	2.3	20	10	24	2		×1	8 2			0036
1 2	- 71	1.1	7772	1	07070 F	'	1147	WAI		WIND	, I	A ID TE		-	10,			14 1	1	1 1	1 0 12	1	1	0035
								COLOR	TRAINS.	DIR. O	R INTE	ER ORY	WET O	VIS. O	ne l	SPECI BSERVA								
										27 51	5 08	0 022	017	7 1	3		j							
		MESSENGR TIME HR 1/10	CAST NO.	CAR TYP		(m)	1	*c	5 -	· . SI	GMA-T	SPECIFIC VOLU	A7 UTN	0 . M. 10 ³	200N		D 2 ml/l		- 01/I	TOTAL - F		NO3-N pg - at/l	SI O4~Si yg = pt/l	рН
				S 1	rD ' 000	0	0.2	284	3366	5 2	686	001204	1 00	00 '	146	01								
		071		089	5 000	10	0.2	284	336	2 د د	686				146	01								
				S 1	ro 001	. O	02	264	3366	5 2	687	001190	6 00	12	145	94								
		071		OBS					336	58														
				S 1				244	3 3 6 (689	001175			145	87								
				51			0 2	224	337		693	001129	9 00	35	145	60								
		07]		OBS	-				337															
				SI			0	184	338		705	001025	3 00	57	145	67								
		07]		OB5					338						,									
		071		089				142	339.		718				145									
				S1				151	339		720	000881			145									
		0.7.		S1				213	341		728	000806	6 01	0.2	145									
		071		OBS				232	341		731	00715			146									
		07.			TD 012			293	343		738	000715	8 01	21	146									
		071		085	-			339	344		744	000440	0 01	3.0	146									
				S1				349	344	_	745	000648			146									
		071		\$1				402	3469	_	756	000556	0 01	68	146									
		071		089				416 444	348	_	759 763	000501	0 01	n.,	147									
		071		089				466	349		766	000501	0 01	74	147									
		01			TD 030			463	349		767	000467	9 02	10	147									
				51				436	349		771	000487			147									
		071		089				427	349		773	000433	5 02	04	147									
		0.,			TD 050			425	349		773	000430	5 03	0.7	147									
				51				414	349	_	773	000439			147									
		071		083				410	349		773	00040,		2.3	147									
		, , ,	•		TD 070			386	349		774	000428	5 03	94	147									
					rD 080			356	348	-	777	000410			147									
		071		083				355	348	_	776		-		147									
				51				353	348	_	777	000416	. 04	7.7	147									
		071		089	-			352	346	_	777	300.10			148									

CTRY ID.	SHIP	LATITUDE	LONGITUO	E H	MAR		STA	TION	TIME	YEAR	CRUIS	ORIGIN	STATIC		DEPTE	DE	AX, PTH	085	WAV		WE THS		CLOUD			NOOC	
COOL NO.	CODE	1/10	1	/10 6	10"	7.	мо	DAY	HR,1/10		NO		NUMB		BOTTO		OF IPL'S	DIR	HGT F	ER SE	A CO	DE 1	TYPE AMI			NERMU	
31 22	IN .	44357N	04859	3 W	149	48	01	29	093	1965	LC.	2 00	5		0284	4 (2	۷.	2		λ:	1	8 2			0036	
						WAT	ER	\perp	WIND	BAR	n- L	AIR TE	MP. *C		NO.		SPECIA								,		
						COLOS	IRAN Im I		- OR FORG	O MET	ER	ORY BULB	8U1			20.0	ERVAT										
								27	514	+ 11	0	017	01	1 7	08												
	MESSENG TIME HR 1/10	I NO. TY		îH (m)	ī	*c	,	٠/	StG	MA-T		IC VOLL		≨ △ D DYN, A x 10 ³	A	DUNO	, 0	2 ml/l		4-P - at/l	TOTAL-		NO2-N og + at/1	NO3-N µg - at/f	\$1 O4~\$		C.
			TD O	000	0	019	3.3	16	26	564	00	1410		0000		4476	-										
	09			000		019		163		664	00	1410	7	0000		4476											
			_	010		009		26		572	00	1331	Q	0014		4475											
				020		003		34		79		1267		0027		4475											
	09)25		001		377		82	00	1207	0	002		4475											
				30		002		40		84	0.0	1221	3	0039		4477											
				050		006		47		89		1167		0063		448:											
	09	3 08	S 00	050	0	006		472		89						448											
		5	TD 00	75	0	007	33	144		90	0.0	1155	5	0092		4488											
	09	3 OB	5 00	75	Q	007	33	486	26	90					14	4486	3										
		S	TD 0	100	0	011	33	52	26	92	00	1136	4	0121		4494											
	09	3 08	S 0	100	0	011	33	515	26	92					14	4444	+										
		S	TD 0	125	0	016	33	56	26	96	00	1104	2	0149	1	4501	1										
			TO 0.	150	0	029	33	63	27	701	00	1057	5	0176	14	4512	2										
	09			151	0	030	33	632	27	701					14	4513	3										
			TO O	200	0	078	3 ±	85	27	716	00	0918	8	0225	5 14	4545	0										
	09		S 0.	201	0	079	3.3	852	27	716					14	4546											
	09	3 OB	S TO	232	Ü	101	33	995	27	726					14	4562	5										

REFERENCE C18Y ID. CODE NO.	COOE	LATITU	DE 1/10	LONGITUDE	DRIFT	MARS SQUA	RE		TION TO	ı	YEA	R	ORIGI CRUISE NO.	OTANI TATS MUN	ON		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	000	WAVE ERVATIONS HGT PER SE	WEA- THER CODE	CODES	:	S.	NODC FATION UMBER
31 223	IN	4436	5 N	04908 W		149	49	01	29	109	196	55	LC2 00	06			0159	00	23	2	X1	8 2	1	- 1	0037
			,				WAT COLOR CODE		S. Die	FOR	CE A	ARO METER (mbs)	R DRY BULB	BL	ET C	vis. :00E	NO. OBS. DEPTHS	SPEC OBSERV	ATIONS						
	MESSENGA TIME HR 1/10	OF NO.	CAR		(m)	Ţ	°C	2	•/	Sit	GMA-	T	SPECIFIC VOI		≨ ∆ OYN x 1	. M.		JND	O 2 ml/l	PO4-P vg - a1/1	1014 L → P µg - 01/1	NO2=N µg = at/l	NO3-N yg + ol/l	\$1 O4~\$1 pg = a1/1	
	10	9	0B3	ro 001	0	00)74)74)65	3 3 3 3	14 138 14	2	659 659 660	1	00145		00	15	14 14	501 501 498				I	I		1
	10	9	0B:	TO 002 S 002 TO 003 TO 005	5	00)60)59)61	3 3 3 3	115 3150 315 314	2	660 661 660 659		00144 00144 00145	14	00.	43	14 14	498 498 500 506							
	10	9	083				68		135		659					_		506							

REFER CTRY CODE	ID. NO.	SHIP	LATITU	JDE 1/10		GITUDE	DRUFT	MARS SQU			TION IGMT		YEAR	CRU		STATIO	v .	DEPTH TO BOTTON	MAX. DEPTH OF S'MPL'S		WAVE ERVATIONS	COD	CODI	2	S	NODC TATION UMBER
31	223	IN	4440	5N	049	921 W		149	49			123		5 L	2 00	7		0055	υo	22	2	x1	8 2	2		0038
									WA	TER	Τ,	WINO	BA	100	AIR TE	MP. °C	1	NO.		CIAL						
									COLOR	TRAN!	DIR.	SPEE	D ME	TER	DRY BULB	BULE	COD	OBS. DEPTHS	08288V							
											26	51	5 1	30	028	02.	2 7	0.3								
		MESSENG TIME HR 1/10	OT NO.	CA TY		DEPTH	lm)	T	₹	S	٠/	SIC	SMA-T		OMALY-X		₹ ∆ 0 DYN. N x 10 ³		DOUT	02 ml/l	PO4-P µg = at/l	FOTAL = F				
		12	3	S OB	TD S	000			005		14 140		559	00	01451		0000		497 497			1	1		1	İ
				S S	1D 10	001	0 U	0	005	33 33	13 12	2	558 658		01460 01468		0015 0029	14	498 499							
		12	3		TD	002	Ü	0	063	33	111	2	657		01469		0044	14	500							
		12	3	0B	TD S	005			058 058		124		659 659	0 (01459	75	307		502 502							

Table II. Observed and interpolated oceanographic data taken by USCGC DUANE on North Atlantic Standard Monitoring Section 3, 14–15 February 1966; prepared from NODC listing No. 31–792.

REFERENCE	SHIP	Τ.	ATITUDE		LONGITUDE	DRUFT	MARS			TION T	IME	YEAR		-	A TOR'S		DEPTH	UEP	н		WAVE		WEA		ODES		NDDC
CIRY ID.		;		10	1/10	ã g	10*				4R,1/10		CRUIT		OITAT2		80110	N S'MP			HGT PE		COD		E AM		NUMBER
31 79	2 DU	44	406N		49185W	_	149	+ -	\rightarrow		010	1966		02	6		0064	+-		3	1.0.1	1 5	_	6	-		0001
							[WA	ER	T-1	WIND	8AR	0.	AIR TE	MP. °C	1	NO.	1					,				
								COLOR	TRANS	DIR.	SPEED	MET	ER	DRY BULB	W ET	COD	200	0.000	ECIAL IVATIO								
										32	535	21	5	007	006	7	04										
	MESSE? TIM HR 1/	이 다	AST IO.	CARD TYPE	DEPTH	(m)	ī	℃	5	٠/	SIG	MA-1		FIC VOLU		₹ Δ 0 34N. N x 10 ³		OCITY	021	m(/)	PO 4		TOTAL-1			NO3-N µg = 01/1	
				ST	000	o	0	122	33	54	26	88	00	1160	1 (0000	14	528						İ			
	0	10	C)85 5T0	000			122 127		540 54		88	0.0	1180	3 (0012		528									
	0	10	C)BS 510	001	0	U.	127 128	3 3	544 54	26	88		1182		0024	14	532									
	0	10	C	185	002	4	0	129	33	543	26	88					14	535									
	0	10	C	510 86(003			135 172		58 844		709	00	1158	3 (0035		1539 1563									

REFE	RENCE	SHIP		ĺ		RIFT DCTR	MARSE			TION				ORIGI	NATOR	S	DEPTH	MAX.		WAVE	WEA-				400C	
CODE	ID. NO.	CODE	LATITU	DE 1/10	LONGITUDE		SOUA 10°			(GMT	HR,1/10	YE A	R		STATIO		TO BDTTOM	0.5	083	HGT PER S	THER	TYPE AM		S1	NOITATION R38MU	
3.1	792	DU	4436	7N	049057	4	149	49	0.2	14	035	196	06.	0.2	7		0091	01	32		5 x1	6 2			0002	
							(WA1	ER		WIND		A RO	A IR TI	MP. 10		NO.		CIAL							
							19	DLDR DOOE	TRANS Im I	DIR	SPEE OR FOR	D A	A ETEI (mbs)	R ORY	3 W		OBS. DEPTHS	OBCCBL	ATIONS							
										32	51	7 .	215	011	00	0 7	05									
		MESSENGE TIME HR 1/10	T NO.	CAR		i (m)	т	*c	\$	٠/	SIC	SMA-	т	SPECIFIC VOL		≨ △ D DYN, M x 10 ³		OCITY	0 2 ml/l	PO4-P ug = 01/1	TOTAL=P µg = ot/l	NO2-N ug - 01/4	NO3-N µg - ai/l	\$1 O4-\$1 \doing = 01/1	рн	5
																										T
					TO 00		_	16	33			685		001211	L 4	0000	14	525								
		039	5	08				16		494	- 21	685					14	525								
					TD 00			18	33			686		001202	8 9	0012	14	527								
		0.35	>	08:				18		507	_	686						527								
		0.24			1D 00			19	33			686		001204	+ 1	0024		529								
		0.3!	5	OB				19		506	_	686						530								
		0.3		-	TD 00			20	33			686		001202	20	0036		532								
		V 3	9	08:				26		542		688		00117		a.v		538								
		0.39	_	OB.	TD 00 S 00			27 38		55 631		688 694		001178	39	0060		538 548								

REFERENCI	Η,	SHIP	LATITU	- 1	LONG	ITUDE	NDCTR	MARS	A.R.E		TION IGMT		YEAR	CRUI		ATOR"S	N	+	DEPTH TO OTTOM	DE	PTH Of		WAV SERVA	TIONS		WEA- THER CODE	CLOUE	2		NOOC STATION NUMBER
ODE NO	-			1/10		- 17 10	-	10"	1"			IR.1/10		NU	-		*	+		3 7	A PL*S	DIR.	HGT F	ER S	E A		TYPE A		_	
31 79	2	DU	4432	2 N	048	488W	-	149			14	097	1966		02			1	536	1_0	06	29	,1 1		4	X 1	6 1			0003
									WA	FR		MIND	BAR		AIR TE	иР. °С	_ ,	/IS.	NO.		SPEC	IA L								
									COLDR	TRANS	DIR.	SPEE	- Inch		DRY BULB	W E1	100	and	OBS. SEPTHS	085	AVRE	TIONS								
									CODE	,m,	-	FORC		-			+			1			ļ							
											29	514	21	7	011	00	9 0	1	11	1_								,		
		AESSENGR		CAI	80			Ι.	*c	١.				SPECI	FIC VOLU	ME	≥ △	D	SOI	UND		n12	, PO	4~P	10	TA L-P	NO2-N	NO3-N	SI O4-5	i
		TIME	T NO.	TY		DEPTH In	n)	1	C	,	*/	210	MA-T	ANO	MALY-X1	07	DYN. x 1	o ² .	VEL	OCIT	Υ '	0 2 ml/	94	- 01/1	μς	9 = 01/1	ug - at/	μg - αt/		
	F	HR 1/10	+			-				+				-		-		_	+		-		_		\vdash			+	1	+
	- 1				TO I	0000	1	1	134	33	5/4	1 24	87	00	1186	1	000	0.0	1.4	53.	a l		1			I		1	1	ł
		097	7	0B		0000			134		542		87	00	1100	1	000	, 0		53										
		097		08		0007			135		546		88							53										
		0 9 1	,		ID.	0010			142	33			88	0.0	1177	7	001	D.		53										
		097	7	08		0018			170		641		93	00	11,	'	00.			55										
		0,	,		TD	0020			187	33			96	00	1102	3	002	23		56.										
					TD	0030			260	33	_		711		0961		003			60										
		097	7	OB.		0037			301		107		19	- 0						62										
				5	TD	0050)	0	357	34	30	2 '	729	00	0791	3	005	51	14	64	9									
		097	7	08	5	0055	,	0	368	34	338	2 '	731						14	65	5									
		09	7	08	5	0072	2	0	360	34	351	2	733						14	65	5									
				S	TD	0075	5	0	361	34	37	2	735	0.0	0744	5	007	70	14	65	6									
				S	TO	0100)	0	365	34	47	2.	142	0.0	0676	7	300	8 8	14	66	3									
		097	7	08	S	0100)	0	365	34	468	2	742						14	66	3									
				S	TD	0125	5	0	364	34	52	2.	746	00	0638	3	010) 4	14	66	7									
				S	TO	0150)	0	362	34	56	2	750	0.0	0608	9	012	2 0	14	67	1									
		097	7	08	5	T0152	2	0	362	34	567	2	750						14	67	2									
				5	TD	0200)	0	401	34	68	2	755	0.0	0562	5	014	• 9	14	69	8									
				S	ΤD	0250)	0	431	34	77	2	759	0.0	0531	7	01	77	14	72	0									
					TD	0300			450		83		762	00	0513	0	020	3		73										
		09	7	08		T0307			452		840		762							+73										
					TD	0400			443		85		764	00	0500	8	025	54		+75										
		0.91	7	08		0464			435		857		766							+75										
				_	T O	0500			429		86		766	0.0	0491	6	03(3		+76										
		09	7	ОВ	S	0598	3	0	411	34	849	2	768						14	77	0									

	ENCE	SHIP				- ª	MARS		STATIO					ORIGIN	ATOR'	2	DEPTH	DEPTI			VAVE		WEA				1	NOOC	
CODE	10. NO.	CODE	LATITUD	1	LONGITUDE	NDCT	SOU	1	₹G.A			YEAR	CRUISE		STATIC		BOTTON	OF			V A TIC		COD					MUMBER	
		-		1/10	1/10		10*		MO DAY				NO.		NUMB	E K		SIMPL	S DIR	. Н	GT PER	SEA		TYPE	AMT				4
31	792	00	44294	+N 1	J48357W		149		02 14	13	2 1	966		0.2	9		2651	09	34	4		4	X 1	6	6			000	4
								WA	,	WIN		BARC	'۔۔ا	AIR TE	MP. °C	V15.	NO.	SP	ECIAL										
								COLOR	TRANS D	IR.	OR OR ORCE	METE (mbs		DRY ULB	BUL	COD	DEPTHS	OBSER	VATION	S									
									2	_	14	23		33	0.2	2 7	11			\dashv									
		MESSENG	CAST	CARÉ			Τ.	4		_			SPECIFIC	YOLU	IME	≥ △ 0	50	UND			PO ₄ -	,	101A L-1	NO2-		NO3-N	SIO4	- 51	_
		TIME HR 1/10	or NO.	TYPE		(m)	'	°C	\$ *%		SIG M	A -T		ALY-XI		X 103		OCITY	02 m	M	10 - 0		νg · α4/1	ug - 0		μg - o1/l			ł
															_		1									-			
			1	5 T	D ' 000	0	' 0	468	3431	,	271	9	000	887	0	0000	14	688		ł		- 1		1	ı		1	'	
		1.3	2	OBS	000	0	0	468	3431		271					-		688											
				ST	D 001	0	0	468	3431		271	9	000	888	0	0009	14	689											
		13	2	085	001	0	Ü	468	3431	4	271	9					14	689											
				ST			0	466	3431		271	9	000	887	2	0018	14	690											
		13	2	085			0	465	3431	3	271	9					14	691											
				ST				451	3431		272		000	875	2	0027	14	686											
				ST				380	3431		272		000	805	7	0043	14	659											
		13	2	OBS				375	3430		272						14	657											
			7	ST				344	3432		273		000	768	6	0063		648											
		13	2	OBS				338	3431		273							646											
		13	2	ST OBS				433	3454		274		000	690	9	0081		693											
		1.5	_	51				450 477	3458		274							701											
				ST				500	3465 3473		274			658		0098		717											
		13	2	085				505	3475		274		000	627	i	0114		731											
		1)	_	ST				509	3484		275		0.00	560	_	0144		735											
		13	2	085				509	3485		275		000	200	9	0144		745											
			-	ST				499	3487		275		000	533	2	0171		749											
				ST				488	3489		276			511		0171		753											
				ST				467	3492		276			476		0247		761											
		13	2	085				462	3492		276		000		-	0241		763											
				ST				443	3492		277		000	459	2	0294		768											
				STI				423	3492		277			446		0339		776											
		13	2	C85	064	1		416	3491		277		- 0 0			2,		780											
				ST				4J8	3492		277		000	441	2	0383		786											
				ST				400	3491		277			443		0427		800											
		13	2	085	T085			398	3491		277		500	. + 5	_	0 - 2 1		808											

																	,			
REFERENCE			ARSOEN	STATION		. L		ATOR'S		DEPTH	MAX.	001	WAVE ERVATION	16	WEA-	CLOUD			NODC	
CODE NO. CODE LATE			SOUARE	(GMT		100		STATION NUMBER		TO MOTTOR	OF S'MPL'	l.	HGT PER		THER				TATION	
	1/10 165N 04				HR.1/10 159 196		03			3292	13	1	101171	4	Ų,					
1 31 1 7 2 2 0 1 4 4 2	0314 04	01.0M 1	49 48 WAT		WINO I			MP, ℃	1		13	34	1 1 1	4	X1	6 7	1	- 1	0005	
			COLOR		SPEED	A RO-	DRY	WET	VIS.	NO. 085.	SPE	CIAL								
			CODE	m) DIR.		(mbs)	BULB	BULB		DEPTHS	OBSERV	~ 110113								
				24	520	215	067	044	7	12										
MESSENGE CAS		DEPTH (m)	r *c	s ·/	SIGMA-		ECIFIC VOLU	107 0	νΑ. Ω.	SOL	INO	0 2 ml/l	PO 4-F		OTAL-P	NO2-N ug - 01/1	NO3-N	\$1 O4-\$1 9g - al/1	рН	2
HR 1/10						_			x 10 ³					1	-	74	yg - 01/1	, , a	1	4
	1)	l														
	STD	0000	0453		2742	_														
159	085	0000 0009	0453	34710		Q)				1.6	. 7.									
159	OBS STD	0010	0435	34330 3433	2724 2724	-	000840	7			676 676									
	STD	0020	0427	3433	2725		000832				674									
159	085	0025	0422	34334			,00052				673									
139	STO	0030	0412	3433	2727	-	000818	1			670									
	STO	0050	0391	3433	2728		000803				664									
159	085	0050	0391	34327							664									
	STD	0075	0405	3449	2740	0	00697	7			676									
159	085	0076	0406	34491	2740					14	677									
	STD	0100	0386	3455	2746	- 0	000638	6		14	673									
159	OBS	0100	0386	34546							673									
	STD	0125	0375	3457	2749	(000611	.5			673									
159	OBS	0148	0364	34612							673									
	STD	0150	0367	3462	2754	(000568	6			674									
159	OBS	0197	0426	34762							709									
	STO	0200	0426	3476	2759		000525				709									
	STO	0250	0425	3479	2762		000507				717									
159	STD 085	0300 10395	0423	3483 34883	2764 2770	(000487	U			725 739									
154	STD	0400	0417	3488	2770		000446	. 1			740									
	ST0	0500	0399	3489	2772		000446				749									
	STO	0600	0386	3489	2773		000426				760									
159	085	T0650	0380	34892		•					766									
	STO	0700	0377	3489	2775	(000424	3			773									
	STD	0800	0372	3489	2775	(000426	7		14	788									
	STD	0900	0367	3489	2776		000428			14	802									
	STD	1000	0363	3490	2776	(000432	0		14	817									
159	085	T1044	0361	34895						14	824									
	STO	1100	0359	3490	2777		000431				832									
	STD	1200	0355	3491	2778	(000428	10			847									
159	085	1251	0353	34912	2779					14	855									

REFEREN	CE SUIT			_ e	MAR		STATIO	N TIME			ORIG	INATO	R'S		OEPTH	MAX.		WAY	/£	WEA				NO	onc
CTRY IS	COOE	LATITUE	1/10	LONGITUDE 17/10	10*			MT)		EAR	CRUISE NO.	STAT			101104	OF S'MPL"		SERVA	TIONS PER SE	COD		_			TION MBER
31 7	92 DU	4424	_	047555W	149	++	02 14	1 -		966	0	32		1	3840	14	32	\Box		4 X2	-1	1		0	006
/ .					-	WAI		WIN		BARC	A IP T	EMP.	t	4	NO.			ו' '	ŧ	. // _	, , , ,	, ,		, 0	0001
						COLOR	TRANS.		PEED	METE	R DRY		ET C	VIS. 00E	0.01	992 V9328O									
						CODE	Im)		ORCE	{mbs	\rightarrow	-+	JLB	-				-							
								17 5	18	15	9 078	0	56	7	13			<u>L, </u>							
	MESSENG	CAST	CAPO		т	~	٠. ي	·.	SIGMA	\-т	SPECIFIC VOI		₹ Δ oyn,	D M.	SOU		O ₂ mt/		04-P	TOTAL-				14-Si - a1/I	ρH
	HR 1/10	1			-								х 1	0,	7.00	-			- 01/1	pg - un	Dy - 0.7	νg - σ	71 74	4171	
		1						.		.			١												
	2.0	-	ST			558	3429		270		00100	53	000	00	147										
	20	5	OBS			558	3428		270		00005	77	00	1.0	147	-									
	20	ε.	ST OBS			521 517	3430		271 271		00095	1.1	00	τO	147										
	20)	ST			517 464	342		272		00088	0.3	001	10	147										
	20	5	085			423	343		272		00000	رں	00	. 7	146										
	20	,	ST			420	343		272		00082	54	002	2 8	146										
			ST			380	343		273		00078		002		146										
	20	5	OBS			372	343.		273		000.5	0 4	~~-	•	146										
	-		ST			375	3436		273		00076	49	006	5.3	146										
	20	5	OBS		0	376	343		273					-	146										
			ST		0	365	343		273		00074	73	008	3.2	146										
	20	5	085	0115	0	361	343	73	273	5					146	63									
			ST	D 0125	0	367	3442	2	273	8	00071	68	010	00	146	67									
			ST	D 0150	0	387	3454	4	274	6	00064	86	01	17	146	82									
	20	5	085	0174	0	415	346	39	275	1					146	99									
			ST	0200	0	467	3479	5	275	4	00058	08	014	48	147	26									
	20	5	085	0230	Ü	514	348	57	275	7					147	52									
			ST	D 0250	0	504	348	ь	275	8	00054	65	01.	76	147	51									
			ST			479	3488		275		00050	85	020	3	147	49									
			ST	D 040U	Ü	438	3490	0	276	9	00045	79	04	51	147	49									
	20	5	085			417	3490		277						147	51									
			SI			411	349		277		00043		029	_	147	54									
			ST			394	349.		277		00042		03:		147										
			ST			382	349.		277		00041	73	038	80	147										
	20	5	0BS			378	349		277	_					147										
			ST			376	349		277		00041		042		147	-									
	2	c	ST			373	349.		277		00041	66	046	53	148										
	20	ס	085			371	349		277		00012		25.		148										
			51			369	349		277		00042		050		148										
			ST			365	349		277		00043		054		148										
	20	5	51 065			359 358	3490	-	277 277		00044	24	059	1 2	148										
	20	-	51			352	3490		211 277		00043	0.0	06.		148										
			ST			344			277		00043		063	_	148										
	20	5	085				344				00043	04	068	90	148										
	20	,	005	1433	U	341	349	4.1	278	U					148	9 T									

ID. NO.	SHIP	LATITU	OE 1/10	LONGITUDE	ğ	AARSOEN SQUARE	STATION THE	YEAR	CRUI		ATION UMBER	DEPTH TO BOTTO	DEFIE	08:	WAVE SERVATION		WEA- THER CODE	CLO	DES		NODC STATION NUMBER	
792	טט 2	4420	3 N ()47340W	_			31 1966	1	033		3884			13172		- ·	1	_			+
	-1 1				1 -	WAT		INO T	1	AIR TEM		1	1 13	16		4	X 6	5	8	- 1	0007	1
						COLOR	TRANS. DIR.	SPEED MET OR (mb)	ER	DRY BULB	WET COD	NO. OBS, DEPTH	O D C C D L	CIAL /ATIONS								
			_				16	S28 11	2	078	072 6	13										
	MESSENGE TIME HR 1/10	NO.	C ARD TYPE	OEPTH (m		r tc	s */	SIGMA-T	SPECI	IFIC VOLUA	E	1	UND	0 2 ml/l	PO4=P µg = at/		DTAL = P ig = at/1	NO2- ug - of				
		1			1					-												
	201		ST			0589	3426	2700	00	10627	0000	14	737									
	23	l	OBS	0000		0589	34261	2700				14	737									
	22.		STO			0586	3426	2701	00	10600	0011	. 14	737									
	23	ł.	OBS	0011		0586	34262	2701					737									
	22.		STO			0587	3426	2701	00	10622	0021	. 14	739									
	23	ı	OBS	0029		0588	34262	2701					741									
			STO			0588	3426	2701		10647			741									
	221		STO			0587	3426	2701	00	10672	0053		744									
	23:	l	OBS	0057		0587	34260	2701				14	745									
			STO			0588	3427	2701	00	10661	0080	14	749									
	231	!	OBS	0085		0590	34273	2701				14	751									
			STI			0601	3441	2711	0.0	09792	0105	14	760									
	231	l.	OBS	0112		0602	34504	2718				14	763									
			STO			0581	3460	2728	00	08163	0128	14	758									
			STO			0546	3474	2744	00	06730	0146	14	750									
	231		OBS	0169		0525	34812	2752				14	746									
			STO	0200		0506	3483	2755	00	05652	0177	14	743									
	231		085	T0231		0489	34854	2759				14	742									
			STO			0479	3486	2761	00	05177	0204	14	741									
			STD	0300		0456	3487	2764	00	04899	0430	14	740									
			STD	0400		0418	3489	2770	00	04431	0276	14	741									
	231		OBS	T0443		0406	34893	2772				14	743									
			STC	0500		0403	3491	2773	00	04214	0320		751									
			STO			0397	3493	2776	00	04094	0361		765									
			STO	0700		0389	3493	2776	00	04097	0402	14	779									
	231		OBS	0728		0386	34931	2777				14	782									
			STD			0378	3492	2777	00	04136	0443		790									
	231		OBS	T0865		0371	34907	2776	-				798									
			STO			0369	3491	2777	00	04188	0485		803									
			STD	1000		0361	3492	2778	00	04116			817									
			STD	1100		0354	3492	2779	00	04116			831									
	231		OBS	T1104		0354	34924	2779					831									
			S T 0	1200		0349	3493	2780	00	04060	0608		845									
	231		085	1279		0346	34933	2781			0-00		857									

REFERENCE	1					T					1		GINATO	7.07			MAX.							I		
CTRY IO.	ZHIP	LATITUDE	LOF	NGITUOE	SOU			ION T	IWF	YEAR		CRUISE	STA		\dashv	DEPTH TO	DEPTH	01		VE A TIQI	15	WEA-	CODES			NOOC NOITATE
CODE NO.	COOE	1/10		1/10	10*	1 10	мо	YAC	IR.1/10		- 1	NO.	NUA			BOTTOM	S'MPL"	DIR	HG.	PER	SEA	CODE	TYPE A M	7		NUMBER
31 792	DU	44145N	04	7098W	149	47	02	15	024	196	6		034		Π.	4023	09	21		П	5	X5	6 8			0008
	'			,	'	WAT	ER	Γ'	MIND		A RO+	AIR	TEMP.	°C	, , , , , , , , , , , , , , , , , , ,	NO.			٦' -					•	'	0000
						COLOR	TRANS.	OIR.	SPEEC	, w	ETER	DR'		V E T	VIS.	000	OBSERV	CIAL 'ATIONS	5							
						CODE	(m)		FORC		nbs1	\rightarrow		ULB					4							
				_				21	529	0	78	08	9 0	89	4	13				_						
	MESSENGR	CAST C	ARD.	DEPTH (m)	T ,	°c		٠/	510	MA-1		SPECIFIC V		\$	Δ O.	SOF	ONL	O2 ml	,	PO4-1	, ,	OTAL-P	NO2-N	NO3-N	5104-5	
	HR 1/10	NO. T	YPE	DEPIH (M)	- '	C	,		310	MA-1		ANOMAL	Y-X107	X	103	. VETC	CITY	U2 mil	^ _"	g - a1,	n ,	pg = 01/1	μg - αt/L	μg = σ1/l	ug - at/	
	1111				1		1		+		1			-		\top			1							
	1	1 1	TD	0000	1 0	576	34	15	26	93	1	0011	326	0.0	00	14	730 '		ţ		1		ı		,	1
	024			0000		576		147		93							730									
	0 2 4	0.6	35	0004	0	573	34	154		94							729									
			CTS	0010		575	34			94		0011	282	0.0	11		731									
	024	06	35	0015	0	576	34	152	26	93						14	732									
			STD	0020	Ü	575	34	17	26	95		0011	167	0.0	23	14	733									
			STD	0030	0	573	34	20	26	98		0010	929	00	134	14	734									
	024			0033		572		207		98						14	734									
			GT 8	0050		575	34			98		0010	941	0.0	55		738									
	0 2 4			0052		575		205		98							739									
	024			0070		580		235		00							744									
			STD	0075		580	34			00		0010			83		745									
			TD	0100	-	577	34			01		0010	677	0.1	.09		748									
	024			0103		577		255		Cl							749									
	2.7		STD	0125		560	34			31		0007	910	0.1	. 33		750									
	0 2 4			10147		543		834		51							750									
			STD STD	0150 0200	-	540	34			52		0005			50		749									
	024			0208		496 490	34	95 964		66		0004	041	U	76		741									
	0 2 4		STD	0250		474	34			70		0004	2//	0.1	99		740									
			573	0300		459	34			72		0004		-	20		740 742									
			TD	0400		438	34			74		0004			62		750									
	024			10457		432		965		75		0004	095	02	02		757									
			10	0500		432	34			76		0004	024	0.1	02		764									
	0.24			T0561		433		994		77		5554	~ L ¬	0 2	52		775									
			STO.	0600		429	34			77		0003	984	0.1	42		780									
			GTO	0700		418	35			78		0003			82		792									
	024			T0743		413		995		79		-000		-	-		797									
			TD	0800		405	34			79		0003	931	0.4	22		803									
	024			0893		391		986		81							812									

REFER	ENCE	1					_ =	MARS	OEN	STAT	ION T	ME			ORI	GINA	OR'S	-	DEPTH	MAX.		w	A V E		WEA	CLOU	0.1	 A	
CTRY		DDE	LATITU	- 1	LONG	SITUOE	NDCTR	sou	ARE	- (GMT)	_	YEAR	2	RUISE	STA	TION	\neg	TO	OEPTH		BSERV	/ A TIO		THER	COD	s	STAT	ION
31	-	טט	4407	1/10	01.6	1710		10*	1		DAY H			+	NO.		MBER	-		S'M PL'S			r PER		+	17PE A		NUN	IBEK
21	192 6	0	4407	414	040	336W		149	46 WAT	_		159 IND	1	_	A 10	135 TEM!	*		4023	13	24	<u>-</u> 1		5	X 2	5 8	1	00	09
									COLOR		-	SPEE	D 34	A RO- ETER	_	\top	WET	VIS.	NO. 085.	SPEC		,							
									COOF	(m)		FORG	E (F	nbs1	8ULI	-	8UL6		OFFIRS										
	_		, ,								25	530	, 0	24	117	\perp		5	13			1					,	 	
		SSENGR TIME : 1/10	of NO.	CAR TYP		OEPTH (m)	т	*c	s	•/	SIG	MA-T		ANDMALY		∑ DY:	∆ 0 1. M. 10³	VELO		0 2 m1		PO4-		DTA L = F	NO2-1			ρН
							_							Т															
		0.5.		51		0000			706	339			664		00140	91	00	00	14										
		059		OBS		0000			706		993		64						14										
		059	,	0B3		000			596 599	340)99		74		00130	3 / 0	0.0		14										
				51		0020			708	34			575 577		00130 00128			27	14										
		059	9	083		0020			708	-	166		577		00120	229	00	21	14										
				51		0030			709	34.			81		00124	185	0.0	39	14										
		059	9	085		0049			711		283		86		0012	.02	•	,	14										
				5 1	r D	0050)	0	711	34.			86		00120	75	00	64	141										
				51	D	0075	5	0	715	34	29	26	86		00121	147	00	94	147	799									
		059		OBS		007	7	0	715	342	285	26	86						148	300									
		059	7	OBS		008		0	716	34	399	26	94						148	302									
				51		0100			723	346			715		00094	+31	01	21	148	911									
		059	9	OBS		012			730		348		728						148	320									
				ST		0125			719	348			729		00080		-	43	148										
		250		\$1		0150			554	348			738		00072	277	01	62	147										
		059	,	OBS		0164			522	348			142						147										
				51 51		0200			595 562	348			748		00064			96	147										
				51		0300			35	349			754 760		00058			27	147										
		059	,	089		10352			512	349			65		00053	13	0.2	55	147										
		0,	,	51		0400			508	349			67		00047	700	0.3	06	147										
				51		0500			93	35	-		72		00041			52	147										
		0.59	9	085		T0567			80	350			74		300-4-	,	0 2	16	147										
				ST		0600			+66	350			76		00041	54	0.4	95	147	_									
				51		0700			431	350			80		00038			35	147										
				5 T		0800)		+09	350			8.2		00036		-	73	148										
		059	9	085		0804			80	350			82				-		148										
				ST	D	0900)	0.4	+09	350			81		00039	30	05	11	148										
				ST	D	1000)	04	10	350	0	27	80		00041		05		148										
		059)	OBS		1054			11	349		27	79						148										
				5 T		1100			+11	349	9	27	79	-	00042	91	0>	93	148	355									
				5 T		1200			10	349			78		00044	47	00	37	148	371									
		059		089		1269	2	0.4	108	349	7/.	2.7	78						148										

RENC	E						MAR	SDEN	STAT	ION TI	ME			ORIGIN	ATOR'	5	1	EPTH	MAX.		WAVE		WEA-	CLOUD			NODC	
18	٥.	CODE	LATITUDE		LONGITUDE	DC		ARE	(GMT)		AR	CRUIS		STATIO		7	10	DEPTH	085	ERVA TI	DNS	THER	CDDES			STATION	
Ni	٥.		1	/10	11/	0 Z	10*	1.	MO I	AY HE	R.1/10		NO	1	NUMBI	R	80	MOTE	S'MPL'S	DIR.	HGT PE	R SEA	CODE	TYPE AM	1		NUMBER	
. 7	92	DU !	43481	N ;	045405	N	149					66		03			41	. 0 ช	10	26		5	X 4	5 8			0010	
								WA		w	IND	BARD		AIR TE		v	5. -	NO. 085.	SPEC									
								CDLOR	TRANS	DIR.	OR FORCE	(mbs)		DRY BULB	W E1			PTHS	OBSERV	TIONS								
										27	535	030) (072	06	1 6	1	2										
	- 1	MESSENGR TIME OF	CAST NO.	CARE		(m)	т	tc	s	٠/	SIGMA	-т		MALY-XI		₹ ∆ DYN. x 10	M.	VELO SDU		D2 m1/1	PD4		1014 L=P ug = a1/1	NO2-N ug - al/l	NO3-N µg - pi/l	SI D4-5		S
	-																					\neg	•					\top
	-		1	ST	00 0	0.0	ا 0	672	34:	16	2682	. 1	00	1242	J '	oua	0 '	147	768		1	- 1			,		1	-
		100		oBs				672		158	2682			_			-	147	768									
		100		OBS	0.0)9	0	681	34	145	2679)						147	773									
				ST	D 00	10	0	682	34	15	2680)	00	1261	7	001	3	147	774									
				51	00 0	20	J	687	34	19	2682	2	00	1239	В	0U 2	5	147	778									
		100		085	00	2.1	0	687	34	195	2682	2						147	778									
				ST		3 U	O	692	34.		2682	2	00	1241	0	003	7	147	782									
		100		0BS				696	34		2682							147	785									
				5 T				699	34		2685		00	1216	J	006	2	147										
		100		0 B S				700	34.		2690							147										
				ST				700	34.	_	2693			1146		0 U 9		147										
		100		ST				679	344	_	2700		00	1078	2	011	9	147										
		100		085				642		448	2708						_	147										
				ST				628	340		2710			0986		014	_	147										
		100		\$ T				549	34		2722		00	0878	2	016	ğ	147	_									
		100		085				520		487	2727		0.0	07/0			_	147										
				ST				512	346		2737			0743		020		147										
				5 T				1502	34		2756			0652 0572		024 027			750									
		100		06S				501		873	2759		00	0312)	021)	147										
		1.70		SI	-			516	34		2767		0.0	0462	1	032	7	147										
		100		OBS				517		J59	2772		00	0402	•	0 5 2	•	147										
				ST				514	35	_	2773		00	0442	1	037	3	147										
				ST				484	350		2774		_	0433	_	041		148										
		100		OBS				467	350		2775		00		-	•	•	148										
				ST	_			460	350		2775		0.0	0434	0	046	1	148										
				ST				437	34		2776			0431	-	050		148										
		100		OBS				422		976	2777		•				•	148										
				SI				413																				
				ST				386																				
		100		035				378	34	74P	2762	P																

TABLE III. Observed and interpolated oceanographic data taken by USCGC HUMBOLDT on North Atlantic Standard Monitoring Sections 2 and 3, 9–12 March 1966; prepared from NODC listing No. 31–702.

CTRY CODE	10. NO.	SHIP	LATITU	DE 1/10	LONGITUD	/10		RSDEN U ARE	S MO	10	ON TI	IME R.1/10	YEAR		JISE !	ATOR'S STATION NUMBER		DEPTH TO BOTTON	DEPTE	0	BSEF	VAVE RVATIO	SMC	W E A	2	LOUD		5	NODC TATION UMBER
31	702	HU	4440		04918	W	14	_	+	+	-	-	1966	T	02	6		0057		05	\neg	3 4	Ť	Х 6	1:	8			0001
								W	ATER		v	VINO	BAR	5-	A1R TE	MP, °C	vis.	NO.	SPE	CIAL	7								
								COL	R TRA	NS.	DIR.	OR FORCE	141611		DRY BULB	W E T BULB	coo	OBS. OEPTHS	OBCERS	VA TION	s								
											33	515	25	4	017		6	04											
	MESSENGE CAST TIME of NO. HR 1/10				RO DEP	TH (r	1)	т °с		5	٠/	\$IG/	MA-T		CIFIC VOLU	חל סי	△ D N. M		UNO	D ₂ ml	Z4	PO 4-		TOTA L = 1) ₂ =N - 01/I	NO3-N yg - al/l	\$1.04-\$1 99 - 01/1	рН
						000		0107		35		_	90	0	01158	8 0	000		521										
	0 9 2			TO 0	010	1	0107 0103	3	35		26		0	01154	2 0	012	14	521											
			0B S		010 020		0103 0102		35 35	59 6	26 26		01	01153	0 0	0 2 3		521 523											
	092				TD O	025 030	1	0102 0102 0100	3	35 35 35		26 26 26	92		01147 01145		035 058	14	524 524 527										
						054		0100			69	26							527										

_	RENCE	SHIP	LATIT	105	LONG	SITUDE	CTR	MARS	OEN ARE	STA	TION		YEAR		_	ATOR'S		DEPTH	MAX. DEPTH	08	WAV SERVA		WEA-	CLC	DES.			NODC
CODE	NO.	CODE		1/10		11/10	INDC	10*	1.	мо		HR,1/10		CRUISE NO.		NOITAT REEMUR		BOTTOM	OF S'MPL'S	1	HGT I		CODE	TYPE				UMBER
31	702	HU	4436	5 N	049	04 W		149	49	03	09	112	1966		0.2	7		0002	00	15	2 .	3	XЬ	5	8			0002
								(WA	TER		WINO	BAR	0.	AIR TE	MP. °C		NO.	SPEC	TAI								
									COLDR	TRAN	S. OIR	SPEE OF	D MET	ER	DRY IUL8	WET	CDD	OBS. DEPTHS	OBSERV									
								Ī			36	_		4 0	22		7	04										
		IIME	CAST NO.	CAT		DEPTH	lm f	Ť	°c		14.	SI	GMA-T	SPECIFIC	C VOLU	07 0	△ 0 YN. N x 10 ³	300	OCITY	02 ml/l		4-P - 61/1) TA L - P g - 01/1	NO ₂ -		NO3-N Ng - 01/1	SI O4-S µg + at/	
		HE 1/10		S	тр	000	0	0	149														ļ					
		11	2	08	S	000			149																			
		112			GT	001			147																			
				08		001			147																			
	112			T O	002			140										_										
		11	2	08		002			137		782		706						542									
					TO TO	003			135		79		707		999				542									
		11	7	08	TO	005			135 135		82		710 710	V 00	977	2			546 546									
		7.7	e	0.0	3	000	0	•	137) .	01:	, ,	110					14	240									

REFERENCE CTRY IC CODE NO	D.	CODE	LATITU	DE 1/10		SITUDE	DRIFT	MAR SQU	ARE		TION	TIME HR.1/10	YEAR		CRUISE NO.		ITAT MUN	ON	1	DEPTH TO DTTOM	DEPT OI S'MP	TH F		WAV ERVA	tions	- 1	WEA- THER CODE	C	OUD DES		NODC STATION NUMBER	
31 7	02	HU	4434	N	048	55 W	-	149	48	03	09	127	1966	5		02	7 – 7	Д	0	192	0.	2	18	2	4	- 1	X 6	5	8		000	3
									WA	TER	1_	WIND	BA			IR TEA	_			NO.	S	PECIA	.									
									COLOR	TRAN		SPEE	1 111			JLB	BU.	ET CO	DE D	OBS. DEPTHS	DBSE	RVATI	ONS									
										\vdash	01	51		64	0.	22		6	1	08												
		MESSENGR TIME HR 1/10	ND.	C A TY		DEFTH	(m 1	ī	*c		s ·4.	sic	MA-T		SPECIFIC			₹ ∆ DYN, x 10	м.	SOU	JND JND	0:	ا/امع		4-P - a1/I		TAL-P 0 - 01/I			NO3-N µg - oi/l		5
	ı													T							_					Т			_			
				S	TD	000	0	3	373																							
		12	7	08	S	000	0	3	3732																							
		12	7	08	S	000	9	3	3771																							
				S	TD	00]	U	3	378																							
				S	TD	002			383																							
		12	7	08		002			3847																							
					TD	003			389																							
		12	7	08		004			3971																							
					TD	009			397																							
		12	7	08		007			4002																							
					TD	00			401																							
		12	7	08	_	009			4085																							
					TO	010			409																							
					TD	012			414																							
		12	7	OB	_	014			4179																							
					TD	015			421																							
		12	7	08	S	015	4	3	4243																							

TAT ID.	SHIP	LATITUI		LONGITUDE	DAIF		A R E		TION)	YEA	R	CRUISE		TATIO	N	1	HT93C OT MOTTC	MAX. DEPTH OF		DBSE	V A V É RVA TI	ONS		WEA- THER CODE	COO	ES			NODC STATION NUMBER
	+ +		1/10	1/10	4	10*	1			HR_1/10)		NΩ.	N	UMB	R	1.00	J110m	S'MPL"	S D	IR. F	GF PE	R SE	A	CODE	TYPE A	MT		-	140741827
31 70	2 HU	4433	0 N	048500W		149	48	03	09	143	196	6		021			0	768	07	0	2		.	2	х6	5	a		1	000
							WAT			WIND		A RO	· -	IR TEA	AP. °C	_ vis		NO.	SPE	CIAL										
							COLOR	TRAN!	S. DIR	SPEE OR FOR	1 17	ETER mbal		DRY ULB	BUL			OBS. EPTHS	OBSERV	'A TIQ	NS									
									0.2	+-	-	61	_	28		+	+	0.5			\dashv									
	MESSENG					т .			0 2	101	, , ,	_				5 A 5	-	1			_1_		_							
	TIME	of NO.	CAR		ţm	1	°C	5	٠/٠.	\$10	GMA-1		ANOM.	VOLU:		Z △ D	٧.	SQU VELO		021	n /	PO ₄			A L - P	NO 2-1		3-N - a1/I	SIO4-	
	HR 1/10	-				-		-		+					-	X 10 ³			Cit			P9 -	41/1	20	- 4171	pg - di)	, h0	- 01/1	PUIL	"
					0	1		1	F 13			-															1		-	
	14	2	ST			-	107		58		692		001	142	В	0000)	145												
	14	9	OBS ST				107 120		577	_	692		001	007		0011		145												
			ST				132		74		698		001			0011		145												
			ST				144		81		703 708		001			0022		145												
			51				167		95		718		000			0032 0051		149												
			ST				195		11		729		000			007		149												
	14	3	085				212		200		734		000	137	,	00 72	_	149												
			ST				223		23	_	736		000	731	3	0091	1	149												
			ST	D 012	5	0	251		32		741		000			0109		146												
			ST	D 015	0	0	276	34	41	2	746		000	642		0126		146	-											
			ST	D 020	0	0	319	34	54	2	752		000	586	7	0156	5	146	561											
			ST	D 025	Ü	0	351	34	65	2	758		000	538	8	0184	4	146	584											
	14	3	OBS	T027	6	0	364	34	687	2	760							146	595											
			ST	D 030	0	Ü	365	34	69	2	760		000	527	О	0211	1	146	599											
			ST			0	369	34	69	2	759		000	539	5	0264	+	147	717											
	1 4	3	OBS				371	34	700	2	760							147	728											
			ST			0	373	34	71	2	761		000	537	8	0318	3	147	736											
			ST				382		72		760		000	548	9	0373	3	147	756											
	1 4	3	085	067	8	0	390	34	742	2	761							147	773											

10. COOE . LATITUE		DE 1/10	LOI	NGITU	OE 1/10	DRIFT		JARE	STA	TION TI		YEAR	CRUI!	SE S	ATOR'S TATION		GEPTH TO BOTTOA	DEPTI	- OB:	WAV SERVA		- 1	WEA THER CODE	(CODES		S	NODC TATION TUMBER	
		N	04	834			149	1	03		_	966		02	9		2560	+	-	Ħ		5	Х6		5 8	+		0005	
						1		WA			IND	7		AIR TE	_		NO.	1		ı' '	- 1	- 1	~ 0	1 .	, ,	1	7	0000	
									COLOR	TRAN	DIR.	SPEED OR FORCE	METE (mbs	R	DRY BULB	WET BUL8	CODI	000	Dacen	VATIONS									
											0.8	508	24	0	056		7	13											
	MESSENGR TIME (HR 1/10	CAST NO.	C.A.		DE	PTH (m I		* °C		٠/	SIGM	A -T		FIC VOLU	٥, ١	∆ D YN. M x 10 ³		ONU OCITY	O 2 ml/1		04 - P - 01/I		TA L - F 0 • o1/1		02-N - al/	NO3-N ug - at/l	51 O4-51 pg - a1/1	pН
				- 0		000	`		1170	33	7 7	34.0		0.0	1077				. (()										
	172	,	0B	TO.		0000)170)170		72	269 269		Üΰ	1077	8 (000		552 552										
	172		06			000			196		797	270							566										
	1,2			TO	-	0010			196		80	270		0.0	1032	6 (011		566										
			_	τo		0020			194		88	271			0971		021		568										
	172		οĕ			002			194		908	271		00	0 / 1	2			569										
				TO		030			210		J2	272		0.0	0877	1 0	030		579										
	172		ОВ			0045			247		232	273				- '			600										
	_			τō	Č	050)	c	262		30	273		00	0707	4 0	046		606										
	172		oв	S	C	0068	3	C	306	34	495	275	0						633										
				TD	Ċ	079	5	C	320	34	53	275	1	00	0585	9 (0.62		641										
	172		ОВ	S	Ç	092	2	C	343	34	603	275	5						654										
			S	TO	C	100)	C	339	34	61	275	6	00	0544	9 (076	14	654										
			S	ΤD	0	125	,	C	326	34	65	276	0	00	0504	7 0	089	14	653										
	172		ΟВ	S	0	140)	C	318	34	666	276	2					14	652										
			5	TO	C	150)	C	341	34	68	276	1	00	0498	4 0	102	14	664										
	172		OB	S	ΤO	176	Ċ	C	372	34	702	276	0					14	682										
	172		ОВ			191			372		701	276	0					14	684										
				TΟ		200			373		70	276			0515		127		686										
			_	TΟ		250			381		72	276			0517		153		698										
				ΤQ	-	300		-	1390		74	276		0.0	0519	2 0	179		710										
	172		οв			314			393		739	276							714										
				TΟ		400			418		81	276		00	0502	8 0	230		739										
	172		ОВ			1435			1424	_	831	276							748										
				TD		500			423		86	276		00	0481	2 0	279		759										
	172		ОВ	_		1576			422		877	276				_	3		771										
			_	TO		600			420		88	276		000	0472	7 C	327		774										
	172		ОΒ	5	0	693	5	0	406	34	880	277	1					14	784										

REFERENCE	SHIP			- =	MARS		STATION T				DRIGIN	ATOR'S	Ţ.	OEPTH	MAX, DEPTH		WAVE	WEA				NODC
CTET ID.	CODE	LATITUDE		NGITUDE INDE	200		MO TOAY		YEAR	CRUISE NO.		TATION		BOTTOM	0.5	000	HGT PER S	CODE				STATION NUMBER
31 70.	2 HU	1/1 4426 N		821 W	149	+		_	966		0.30			2743	13	18		3 ×6	5 8	+		0006
3 2 7 7 7 7						WAT		VIND	BARG		AIR TEA		Т	NO.	1	1		- 1	1 - 10	1	1	0000
						COLOR	TRANS. DIR.	SPEED	M ETS	R C	DRY ULB	WET	COD!	240		CIAL ATIONS						
						CODI	29	504	24	-	78		5	13								
	MESSENGP TIME o		ARD TYPE	DEPTH (m)	T	t	s · 4.	SIGM	A-T	SPECIFIC	VOLU- ALY-X1	ME D	△ D YN, M x 10 ³	. SOI	UND OCITY	D2 ml/l	PO4-P	1014L-P	NO2-N ug - a1/1	NO3-N ug - at/l	\$1 O ₄ =	
	HR 1/10				-			-				+		+	-					-		
	1		STD	0000	, o	559	3444	271	8	000	894.	2 0	000	14	727		1	I	I	Į.	I	1
	202	0	BS	0000	0	559	34439	271	8					14	727							
			STD	0010	0	557	3445	271	9	000	884	9 0	009	14	728							
	202	0	BS	0012	Q	556	34454	272	20					14	728							
			STD	0020	Q	548	3447	272	2.2	000	860	8 0	018		726							
	202	0	BS	0029	0	543	34491	272	24					14	726							
			STO	0030	0	543	3449	272		000	839	4 0	ü 26	14	720							
			STD	0050		548	3453	272	2 7	000	819	2 0	043	14	732							
	202		BS	0057		550	34544	272							734							
			STD	0075		537	3458	27:		000	772	6 0	063		732							
	202		B\$_	0086		527	34589	273							730							
			STD	0100		508	3458	27.		000	740	3 0	082		724							
	202		BS	0115		497	34577	273							722							
			SID	0125		507	3462	27:			714		100		729							
	202		STD	0150		525	3470	274		000	678	3 Q	117		741							
	202		B\$ STD	01 7 1 0200		532 524	34766 3483	274		000	E 13 c	2 0	149		748							
	202		85 85	10227		516	34880	279		000	586	2 0	149		751 752							
	202		51D	0250		500	3488			0.00	526		1 -9 -9		750							
			STD	0300		47u	3488	27 <i>6</i> 27 <i>6</i>		000			177 202		746							
			STD	0400		422	3488	276			452		202 250		742							
	202		BS	T0450		404	34884	27		000	712	, 0	()		743							
	202		510	0500		397	3489	27		000	420	7 0	294		748							
			STD	0600		385	3489	27			425		337		760							
	202		BS	10668		378	34897	27		000	120	, ,	1		768							
			STD	0700		375	3490	27		000	416	1 0	379		772							
			STD	0800		368	3490	27			417		420		786							
	202	0	BS	10888	0	363	34905	27							799							
			STD	0900		363	3491	27		000	416	1 0	462		801							
			STD	1000	0	361	3491	27		000			504		816							
			STD	1100	0	359	3491	27	78	000	425	3 0	546		832							
	202	0	BS	T1130	0	358	34910	27	7 8						837							
			STD	1200	0	356	3491	277	8 8	000	427	7 0	589	14	848							
			STD	1300	0	354	3492	277	79	000	430	5 0	632	14	864							
	202	0	BS	1330	0	353	34917	277	79					14	869							

NCE		_ =	MARSOEN	STATION TI		ORIGINA	TOR'S	DEPTH	MAX.		WAVE	WEA-				NODC
I CODE I	LATITUDE	LONGITUDE		IGMTI	YEAR		ATION	BOTTOM	OF	000	ERVATIONS	THER	CODES	}		TATION
NO.	1/10	1/10	10. 1.	MO DAY H		+	JMBFR		3 MPL	_	HGT PEP SE	^ -	TYPE AM	-	-+-	
702 HU 4	+425 N	04805 W	1 4		39 1966	_ 031	. ~	3200	12	19		3 X4	5 8			000
			WA	T	SPEED MET	0-	WET COD	.d Ops.		CIAL						
			COOE	(m) OIR.	FORCE (mb		BULB	DEPTHS	OBJEKY	Allolts						
			-	15	508 24	4 083	1	13								
MESSENGR TIME OF HR 1/10	CAST CARE		1 5	s ·/	SIGMA-T	SPECIFIC VOLUM		۸. ا	UND	02 ml/l	PO4-P vg - a1/I	fOTAL=P µg = at/l	NO2-N ug - al/l	NO3-N	\$1 O4\$1 ug - a1/1	
111111111111111111111111111111111111111											1					
,	, st	0 0000	0508	3447	2727	0008139	0000	14	706		'	'				
239	085	0000	0508	34469	2727			14	706							
	\$T		0498	3448	2729	0007965	0008		704							
239	085		0498	34479	2729				704							
	ŞT		0498	3449	2730	0007895	0016		706							
239	085		0495	34491	2730		000		105							
	ST		0487	3450	2732	0007711			703							
330	\$1		0452 0449	3453 34533	2738 2738	0007132	0039		692 691							
239	085 ST		0407	3455	2744	3006565	0056		678							
239	085		0407	34548	2744	000000	0036		677							
239	ST		0398	3459	2748	0006174	0072		679							
239	085		0397	34592	2749	00001			679							
237	51		0426	3466	2751	0005961	0087		696							
	51		0454	3474	2754	0005686			712							
239	OBS		0458	34754	2755			14	715							
	51	D 0200	0493	3489	2762	0005055	0128	3 14	739							
239	089	T0206	0497	34910	2763			14	742							
	ST	0 0250	0496	3493	2765	0004844	015	3 14	749							
	ST		0492	3496	2767	0004668			756							
	51		0477	3500	2773	000425	022.		767							
239	QB5		0475	35010	2773				768							
	\$1		0443	3499	2775	0004079			769							
	51		0416	3497	2776	0004049	030		774							
239	OBS		0413	34961	2776				775							
	\$1		0404	3496	2777	0004046			785							
330	51		0393	3495 34949	2778 2778	000408	7 0399		797 830							
239	085 51		0370	34949	2778	0004139	0420		807							
	51		0365	3492	2778	000415			818							
239	089	_	0361	34911	2778	00041)	, 040		825							
239	S1		0358	3491	2778	0004234	000		834							
	51		0356	3491	2778	000429			848							
	083		0356	34908	2778			_	854							

								TAB	LE I	II.–	–C	on	tinu	ed											
REFERENCE					T = 1 14 A	RSDEN	STATIO	N TIME		_	DRIGIN	A TOR'	٠,	0.000	MAX.		WAY	, <u> </u>	1		CLOUD		1		
CTRY ID.	SHIP	LATITUE	DE .	LONGITUDE	# 2 SC	UARE		MTI	YEAR	CRUISE	-	TATIC		DEPTH TO	DEPTH	OB	SERVA	TIONS	.	WEA- THER	CODES		- }	STATION	
CODE ND.	CODE	•	1/10	1/10	2 10.	1.	MD DA	Y HR,1/1		NO.		NUMB	ER	BOTTOM	S'MPL"	S DIR.	HGT	PER S	ĒΑ	CDDE	TYPE AM	1		NUMBER	
31 702	HU	4423	N	04754 W	14	9 47	03 10	040	1966	1	03.	2		3200	12	19			3	X 4	5 8	}		0008	
						WA	TER	WIND	BAR	0-	AIR TE	MP. *C	vis.	NO.	CPE	CIAL)								
						COLOR	TRANS.	O RIC	1 77.57		DRY ULB	W E	COD			ATIONS									
						CODE		13 S1				801	-	-											
		,,					1	13 51	2 23	0 0	78	L.,.	1	13	L		<u>!</u>		_						_
	MESSENGE TIME HR 1/10	Y ND.	CAR		m)	T *C	5 .	٠. sı	SMA-T	SPECIFIC	ALY-II	M.E 0.7	₹ △ D DYN. M X 10 ³	SOL VELO	DCITY	D 2 ml/		D4←P + 01/I		1A L - P	NO2=N µg = 0t/1	NO3-N ug - al/l	\$1 О.4— ру - о		3
		1			- }															1				1	
			S T			0546	3434		712	000	957	1	0000		720										
	040	0	085			0546	3431		712			_			720										
	0	2	ST			0492	3434		718	000	893	5	0009		700										
	04(J	OBS			0492 0419	3434	_	718 726	000	u 2.5		0/11/2		700										
	040	1	OBS			0402	3431		728	000	820	4	0018		671 665										
	041	0	ST			0437	3436	_	726	0.00	823	2	0026		680										
			ST			0526	3444	_	722		861		0043		722										
	040)	OBS			0530	3444	_	722	000	001	,	004)		724										
			ST	-		0520	3446	_	724	000	845	2	0064		723										
	040)	085			0519	3449		725						723										
			ST	D 0100)	0515	3446	5 2	725	000	840	2	0085		726										
	040)	OBS	010	3	0513	3446	3 2	726						725										
			ST	D 012	5	0441	3448	3 2	735	000	749	1	0105	14.	699										
			ST			0405	3449		740	000	701	3	0123	14	689										
	04()	085			0404	3449		740					14	689										
		_	ST			0504	347	_	751	000	607	7	0156		742										
	040	0	OBS			0519	3482		753						750										
			ST			0501	3489		758		550		0185		750										
			ST			0482 0449	3488	_	762		512		0212		751										
	0.40	1	085	-		0449	3492	_	769 770	000	455	כ	0 < 60		754										
	040		5 T			0427	3492		772	000	438	7	0305		755 761										
			5 T			0409	3492	_	774		428		0348		770										
	040)	085			0407	3492		774	000	428	9	0 3 4 6		772										
	- , ,		ST			0395	3491		774	000	431	/.	0391		781										
			ST			0384	3491		775		427		0434		793										
	0.40)	085			0382	3490	_	775	000	721	7	0 +) 4		795										
			ST			0376	3490	_	776	000	432	n	0477		806										
			ST			037ŭ	3490		776		434		0520		820										
	040)	085			0367	3490		776	000		_	0		826										
			ST			0363	3490	_	777	000	433	8	0564		834										
			ST	D 1200		0357	3491		778		431		0607		848										
	040)	085	1225	5 1	0356	3490	_	778		- 1				852										

Çŧ	SHIP	1 4 7121	. 5.1				- E	MAR	SDEN		ION TI	ME	v		_	RIGINA	TOR'S		DEPTH	MAX.		WA		_	WEA-	CLOU		T	NODC
ID.	CODE	LATITU	1/10	10	NGITUI	1/10	INDCTA	10*	1.		DAY H	1/10	YEAI	IC.K	UISE		ATION	-	TQ BOTTO	0.6	J 00.	HGT	TION	SEA.	THER	TYPE			STATION
702	ни	4420		04	733			149	1 1				196	6		033		\neg	3475	$\overline{}$		1		3	Х 5	2 1			0.00
	1 - 1					**	- 1		WA			IND		-	T A	IR TEM			NO.	1] [- 1	ا ر	^ >	1 2 1 0	3 1	- 1	0009
									COLDR		DIR.	SPEED	M	ARQ- ETER		RY	WET	VIS.	000	OBCE BY	CIAL /ATIDNS								
									CODE	(m)	13	S22	-	13	-	94	BULB		13	,									
							_	_		1	13	322		\neg	_			^ ^	<u> </u>			_						_	
	MESSENGR TIME HR 1/10	O' NO.	C.A.		DEF	TH (n	n)	Ť	*c	s	٠/	SIGA	1-AN			VOLUM 107	, DA	10 ³		LOCITY	0 2 m1/1		04-P - 01/I		TAL-P g • e1/1	NO2-1			
																	1												
	100			TD		000			591	34		27		0	009	760	00	00		739									
	105		08			000			591		380	27								739									
	105	,	ов	_		007 010			594		+00	27								742									
	105		0B	1D		010			597 604	34	+00	27		O	009	9696	01	10		743									
	10.	,		S TD) 2 O			604	34		27		0	001	272/	0.0	1.0		747									
				TD		030			607	34	_	27				9724 9540		19		748									
	109	5	08			037			608		449	27		U	30) J 4 U	00	29		751 753									
	10.			TD.		050			596	34		27		0	000	9372	0.0	48		750									
	109	5	ов		-	056			590		449	27		0	00	,,,,	00	40		749									
				TD		075			571	34		27		Ω	٥٥٥	9157	0.0	71		744									
	109	5	οВ			075			571		442	27	_	•	00		٠.	' -		744									
				TD		100			594	34		27		0	ดมเ	3660	0.0	93		759									
	109	5	ОВ			111			604		586	27.								765									
				TD		125			578	34		27.		0	008	3052	0.	14		757									
	105	5	08	S	0	148		ō	541		543	27						-	_	747									
				TD	0	150		0	54 Ū	34		27.		0	00	7332	0.	34		747									
			S	TD	0	200		0	515	34	76	274				279		68		746									
			S	TΟ	0	250		0	496	34	34	279	57			521		97		748									
	105	5	OB	S	TO.	294		0.	483	34	386	276	53						14	750									
			S	TD	0	300		0	483	34	39	276	63	0	005	086	0.4	24	14	751									
			S	TD	0	400		0	476	34	39	276	63	0	005	112	0.	75	14	765									
	105	,	OВ	S	0	+37		0	472	34	387	276	64						14	769									
				TD	0	500		Ü	462	34	34	276	69	0	004	+665	0 -	23	1 4	776									
	105	•	ОВ	S	TO	593		0	445	34	975	27	74						14	785									
			S	TD		500		0	443	34	97	27	74	0	004	326	0 -	68	1 -	785									
			S	TΟ	0	700		0	420	34	95	27	75	0	0 Ū 4	307	Ù٤	12	14	792									
	105	>	ΟВ	S	T 0	784		0	402	34	934	27	75						14	798									
			S	TD	0.6	300		0	399	34	93	27	75	0	004	305	04	55	14	799									
			S	TD	0.	900		0	379	34	91	27	76	0	004	·310	0.4	98	14	807									

	ID.	SHIP	LATITU		LONGII	TUDE	39	MARSO	RE		ON II		YEAR	CRU		ATOR STATIC) N	7	OEPTH TO OTTOM	DEPTH OF S'MPL	08		TIONS		WEA+ THER CODE	CLOUD			NOOC STATION NUMBER	
	-			1/10		1710	-	10*			AY H			-				+		1	1	HGT	PER SE	-	_	TYPE AM	-	-		
1	702	HU	4415	N	0461	1 W	1	49					966	<u>L</u> ,	03			ق	432	11	18	, I		3	х3	4 6	1		0010	
								-	WAI		W	SPEED	BARC		AIR TE	_	v	15. (NO.		ECIAL									
									DLDR	TRANS.	OIR.	OR	METE		BUL B	BUI			EPTHS	OBSER.	VATIONS	İ								
								-		_	01	515	18	\rightarrow	122	10	16 7	+	13											
	ſ									ļ	0.1	T .	1 10		166			_				L.,	_	_					1	\neg
		MESSENGE TEME HR 1/10	NO.	CAR		DEPTH (m	3	7	°C	s	٠/٠.	SIGM	A - T	SPEC	OMALY-X	M.E 0.7	₹ ∆ DYN. x 10	M. 3	VELO		D2 ml/		04-P • 01/I		A L - P - 01/1	NO2-N ug - 01/l	NO3-N µg - al/l	51 O4 10 - وبر		S C C
			}							1		١	.			Ţ						-				1	ļ			
				ST		0000			63	344		270		00	01052	9	000	O		768										
		139		OBS		0000			63	34:	_	270								768										
		13	9	OBS		0009			61	344		270		_	21055			,		769										
				ST		0023			06	344		270 269			01055 01103		001			771 788										
		13	2	085		0023			12	344		269		U	01103	0	002	1	14											
			,	ST		0030			89	344		270		Δı	01065	7	003	2		784										
		139	7	OBS		0045			62	344		270		0,	01000	,	000	_		776										
				5 T		0050			70	344		270		0.0	00999	3	005	3		780										
		13	9	085	j	0067		06	80	34	34	271	0						14	788										
				ST		0075			68	34		271		00	00970	7	007	7	14	784										
		13	9	085		0089			50	34		271								779										
				ST		0100			42	34		271			00911		010			778										
			_	ST		0125			24	341		272		01	00824	8	012	3		770										
		13	9	089		0134			18	34		273			7	,	. 1 .	_		776										
		13	2	ST		0150 0185			81	34		273		U	00768	5	014	3		774										
		10.	9	08S		0200			75	34		274		0.0	00669	0	017	r.	14											
				ST		0250			55	34		275			00607		041			772										
				ST		0300			33	34		275			00549		023			772										
		139	9	085		0357			06	34		276		٠,	00217		0-2	,	14											
				ST	0	0400		04	76	34	9.3	276		06	00479	1	049	1		765										
				ST	D	050J		04	22	34	30	277	O.	0.0	00450	1	033	7	14	759										
		13	9	085	, T	0529		04	10	341	398	277	7.2						14	759										
				51	. D	0600		03	93	348		277	3	0.0	00435	4	0 28	2	14	763										
				ST		0700			76	348	8 8	277		00	00435	1	042	5	14	772										
		13	9	085		0714			75	341		277							14	774										
				ST		0800			76	340		277		0 (00433	3	046	9	14	789										
			_	ST		0900			7.7	34		277		0 (00435	7	0 > 1	2		806										
		13	9	089		0930			77	34		277		_						811										
				ST		1000			75	34		277			00439		055	-	148											
		139	_	ST		1100			68	349	-	277		0 (00440	5	060	U		836										
		13.	7	OBS)	1129		U 3	56	34	103	277	. /						148	840										

EFERENC	E SHIP	1		E	MARSDEN	T NOITATE		ORIGI	NATOR'S		DEPTH	MAX. DEPTH		WAVE		EA-	CLOUD			NODC
NO BO	. CDDF	LATIT	1/10	LONGITUDE ES	SQUARE	IGM11	YEAR	CRUISE ND.	STATION NUMBER		10	OF S'MPL'S	1	ERVATIONS	- 6	HER DE	TYPE AM	-		TATION
3 1 70) 2 HU	440	B N (04630 W			207 1966	5 0	35	3	3734	13	18		6 >	(3	3 8			0011
	•				WAT	ER	WIND BA	RO- AIR T	EMP. °C	vis.	NO.	SPEC	IAL	, , ,					,	
					COLOR	TRANS. DIR.	SPEED ME OR EM		WET BULB	CODE	DEPTHS		ATIONS							
						14	FORCE .	39 111	100	7	13									
	Messey	CAST	Τ	Т	T			T -	5	Δ D	T			1	T					т —
	HR 1/	[:] 약 ND.	CARD TYPE	DEPTH (m)	1 °C	s ·/	SIGMA-1	SPECIFIC VOI	302 I D	N. M.	VELOC		O2 ml/l	PO4-P µg - 01/1	FOTA.		ND2-N ug - al/l	ND3-N µg - 01/1	SI D4→Si µg = a1/I	
							2	1			1					-				
	2	0.7	ST		0895	3476	2695	00111	02 0	000	148									
		07 07	08s 08s	0000	0895 0898	34755 34752	2695				148									
	2	0 1	STI		0897	3476	2695 2695	00111	52 A	011	148 148									
			STi		0892	3477	2697	00110		022	148									
	2	0.7	0B5	0022	0891	34771	2697	00110	00 0	0 6 6	148	-								
			ST	_	0913	3483	2698	00108	82 O	033	148									
	2	G 7	085	0045	0921	34878	2701	0000			148									
			ST		0896	3482	2700	00107	35 0	055	148									
	2	07	085	0068	0852	34750	2702				148	57								
			ST		0870	3483	2705	00103	15 0	081	148									
	2	U 7	085	0090	0898	34956	2711			٠	148									
			ST		0881	3497	2714	00094		106	148									
	2	07	ST		0841 0616P	3498 34982	2722	00088	54 0	129	148	600								
	21	U 1	0BS ST(0136 0150	0804	34982	2754P 2725	00085	87 N	151	140	45								
	2	07	085	70183	0758	34913	2729	00000	01 0	101	148									
	2		STI		0737	3494	2734	00077	0.0	192	148									
			ST		068Ü	3499	2746	00067		428	148									
	2	07	OBS	10269	0660	35000	2749	00001	0		148									
	_	-	ST		0628	3498	2752	00061	73 0	260	148									
	2	07	OBS	0364	0571	34965	2758				147									
			STI	D 0400	0543	3498	2763	00052	26 0	317	147	93								
	2	07	OBS	T0494	0486	35000	2771				147	86								
			ST		0485	3500	2771	00044		366	147									
			ST		0465	3499	2773	00044		+10	147									
	-	0.3	STO		0447	3498	2774	00044	05 0	+54	148									
	2	07	088	T0747	0439	34972	2774				148									
			SI		0430	3497	2775	00043	_	498	148									
			ST0 ST0		0416 0402	3496 3495	2776 2777	00043		542	14									
			ST		0391	3495	2777	00043		986 930	148									
			STI		0391	3494	2777	00044		574	148									
	_	07	085	1255	0376	34924	2777	00044	J1 0	014	140	ンプ								

REFERENC	SHIP	Ţ			E E	MARS		TATION TO	ME	ue . e		ORIGIN			7	DEPTH	MAX.	0.5	A.W	VE LTIONS		WEA-	CLOUD	I		NODC TATION	
CTRY IC	CODE	LATITL	1/10	LON	VGITUDE BOY	\$QU		IGMTI MO DAY H	8,1/10	YEAR	CRUI		OFF AT		90	MOTTC	OF S'MPL'S			PER S		THER	TYPE AM			UMBER	
31 7	02 HU	4403	_	04	540 W	149				1966	1	03	6		3	986	10	23	П		2	X 6	58			0012	
	'	,				[WAT	ER V	/IND	BAR	0-	AIR TEA	MP. °C			NO.	SPEC	IAL									
							COLOR	TRANS. DIR.	SPEED DF FORCE	(mb		DRY BULB	BUI	T co	100	OBS.	O83ERV										
						Ì		23	524	14	9	111	1 4	1 5	1	13	_										
	MESSEN TIME			RD PE	DEPTH [m]	T	₹	s ·/	SIGA	AA-I		IFIC VOLU		₹ ∆ 0YN. x 10	M.	VEFO 200		O2 ml/		O4-P		TA L = P p = 01/1	NO2-N vg - 01/l	NO3=N yg - at/I	51 O4-51 vg + at/1	рН	
	H R 17	10	1-					1	-				_								1						٦
	1	1	S	TO	0000	0.	527	3412	26	84	00	1215	5 '	000	0	141	750		'		•				*	'	
	0	1.5	08	S	0000		527	34118	26	84							750										
	0.	15	ΟВ	S	8000		529	34121	26							14											
				TD	0010		528	3412	26			1214		001			752										
			_	TO	0020		523	3413	26.		00	1203	8	002	4		752										
	0	15	ОВ		0021		522	34131	26		0.0	1120	,	007			752										
	0			TO	0030		590 567	3418 34238	26 27		U	1128	4	003	6		741 734										
	0	15	08	TD	0040		560	34230	27		0.0	1013	7	005	7		733										
	0	1.6	08		0054		557	34310	27		00	1013	~	000			733										
	0		08	-	0073		534	34369	27								728										
				TO	0075		534	3438	27		0.0	0919	3	0 J 8	1		728										
				TO	0100		539	3447	27			0860		010			736										
	0	15	OB		0104		540	34475	27								737										
				TD	0125	0	506	3445	27	25	0.0	0840	4	012	5	14	726										
	0	15	0.8	35	T0139	0	488	34439	27	27						14	721										
			S	TD	0150	0	488	3444	27	27	00	0830	5	014	6	14	722										
			S	TD	0200	0	486	3446	27	29	00	00818	9	018	37	14	730										
				TD	0250		484	3448	27		00	0807	2	022	8		738										
	0	15	08		0278		483	34492	27								742										
				OTO	0300		482	3450	27			0796		026			745										
				TO	0400		477	3452	27		00	00783	0	034	7		760										
	0	15	OB		0430	-	475	34531	27						_		764										
	_			OT O	0500		450	3476	27		0.0	0586	4	041	. 5		769										
	0	15	ОВ		0594		430	34954	27				0	0.			779										
				TD.	0600		430	3496	27			0428		046			780										
	0	15		10	0700 10789		433 436	3497	27		UC	0433	U	050	1.4		798										
	Ų	10	08	55 5TD	0800		435	34980 3498	27		0.7	0436		055	2		814 815										
				STD	0900		415	3498	27)0436)0429		059			823										
	0	15	08		0954		415 399	3497	27		U	10429	ر	029	0		825										
	U		UE	3	0774	0	ンプフ	34731	21	1 (146	049										

	ENCE	SHIP	LATITU	D.E.	LONGITUDI	m DCTR	MAR	SDEN ARE	STATIO			'E AR	_	RIGINA				EPTH	MAX, DEPTH		WAVE ERVATIONS	WEA-	CLOUD			NODC
T#Y ODE	NO. CI	300		1/10	11,		10"				R.1/10	EAK	CRUISE NO.		IOITAT 38MUI			TO TTOM	OF S'MPL"		HGT PER SE	THER CODE		_		UMBER
31	702 H	HU	4657	N	04800	W	149	68	03 11	1	63 1	966		013	3		01	37	01	28	5 2	X1	3 6			0013
								WAT	ER	W	IND	BARO		IR TEA	AP. °C	T	TN	10.		SIAL						
								COLOR	TRANS C	DIR,	SPEED DR FDRCE	METE	t [DRY ULB	BULB M E I	COD	. 0	BS. PTHS	OBSERV							
				_					Ž	23	534	16	0	06	00	. 7	0	6								
		ESSENGA TIME R 1/10	CAST NO.	CAS		[H (m)	T	*c	5 •/		SIGMA	N=1	SPECIFIC	VOLU/		E △ C DYN. A X 10 ³	۸,	SOU		07 ml/l	PO ₄ =P µg = 01/I	TOTAL=# µg = 01/1	NO2-N ug - at/l	NO3-N µg - 61/1	\$1 O4-\$1	ρН
				S	10 00	000	1-0	044	3329	,	267	3	001	325	5 (0000		144	489							_
		16	3	0B:		000		044	3329		267 267		001	322.	2 (0013	3		489 492							
		16	3	OB:	5 00	11	0	047	3329	8	267	3						144	493							
		16	3	OB	5 00)20)28	0	047 046	3330) 4	267 267	4		3189)U 26			494 495							
)30)50		051 092	3332		267 268			306) 0 4 () ú 6 !	-		498 524							
		16	3	0B)55)75		098	3352		268	8						149	526							
		16	3	OB.	s 00	82	0	102 104	3368	3 1	269 270	1	001	100.	ا ک	009	5		533 535							
		16	3	S OB		100		134 159	3383		271 271		000	969	1 (0119	9		554 568							

																								4	,				,
EFERENCE BY ID.	SHIP	LATITU			MOCTAL BUILDING	squ			TION T		YEAR	CRUISI NO.		TATH	QN		DEPTH TO DITOM	DE	PIH OF		WAVE ERVATION	SNE	WEA- THER CODE	CLOL	ES		\$.	ODC IATION UBBER	
-			1/10	_	1/10	10*	1.		-	IR.1/10		NO.	 		BEK	-+-		12 //	APL'S		HGT PER	SEA	+	-	_				1
31 702	2 HU	4702	N	04	744 W	149	Ι.	03			966	Ц,_	014			_[172	1.	01	28	6 2		X 3	3	3			0014	l
							W.A	_		SPEED	BAR	J	AIR TEA			VIS	NO. OBS.		SPEC										
							COLDE	TRANS	DIR.	PORCE	METE		DRY ULB	W I	ET C	006	OBS. DEPTHS	095	SERVA	TIONS									
								+	23	533	26		17	0 1	\rightarrow	-	0.7	1											
						_		 	12.5	333	20	1		- 0			-		-		_				1	_			_
	TIME	P CAST	C A		DEPTH (m)	1	*c	s	٠/	SIGM	1-A		C VOLUE		¥ ∆ DYN x 1	. м.		OCIT		O 2 ml/1	PO 4-		OTAL-P	NO2-			51 (34-S) µg = 01/1	рН	
	HR 1/1					+				-					A :	10.	+		+		+	-			+ **	_			_
		1 1				1		1	2.1	1			216	,			Ι,,		_										
	1.0		_	10	0000		049	33		267		001	315	1	00	UÜ		49											
	18		08	_	0000		049		308	267								49.											
	18	1	ОВ		0009		048		308	267				_	~ ~			49.											
				TD	0010		048	33		261			.313		00			49											
				TD	0020		048	33		26		001	312	8	00	25		49											
	18	1	OB		0023		048		312	26		00.	306	2	0.0	٦.		49	-										
				TO	0030		044		32	26		00.	305.	3	00	39		49											
	18	1	ОВ		0045		041	_	329	26				_				49	-										
				TD	0050		042		36	26		001	271	2	00	65		49	-										
	18	1	08		0068		053		476	268								50											
			_	T D	0075		062	33	51	268	39	001	167	7	00	96		51											
	18	1	08	S	0091	0	084	33	584	269	94						14	52	7										
			S	TD	0100	0	096	33	64	269	98	00	088	9	ΟI	24	14	53	4										
			S	TD	0125	0	131	33	80	270	8 (000	990	3	01	50	14	55	ь										
	18	1	08	S	0136	0	146	33	890	271	14						14	56	6										

COOE NO. CODE	1/10 1/10 1/00 N	LONGITUDE 1/10 11/10 04730 W	14 MARO NO 10 10 14		03 11 TER	HR.1/10 200 WIND R. SPEE OF FOR	1966 BAR MET Imb	NO. On AIR TE	STATI	ON BER C VIS.	DEPTH TO BOTTOM O Z 1 O NO. OBS. DEPTHS	MAX. DEPTH OF S'MPL'S O 2 SPEC OBSERV	21	WAVE ERVATIONS HGT PER SEA	WEA- THER CODE	CLOUD CODES		\$1 N	NODC ATION UMBER
MESSENGR CATTURE OF N	AST CAI		m)	T *C	s */.	S11	GMA-T	SPECIFIC VOL		₹ △ D M . MYD x 10 ³		JND	O ₂ ml/l	PO4-P µg • 01/1	101AL-P pg - pr/1	NO2-N ug - 01/l	NO3-N ug - or/l	\$1 O4=\$1 99 - a1/1	ρН
200 200 200 200 200 200	0B S 0B S 0B S S 0B S	TO 001'S 001'TD 002'S 002'S 1D 003'TD 005'TD 007'TS 008 TD 010'S 010 TD 012'TD 012'TD 015'TD	0 0 0 7 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0077 0078 0078 0078 0077 0076 0067 0056 0054 0249 0316 0316 0349	3342 3342 3343 3343 3343 3350 3392 3427 3432 3444 3447 3457 3467	4 2: 2: 6 2: 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	682 682 682 682 682 682 688 7751 755 751 750 755 760	001241 001240 001237 001183 000858 000586 000593	18 12 16 13 18	0000 0012 0025 0037 0057 0075 0090 0105 0118	14 14 14 14 14 14 14 14 14 14 14	506 508 508 510 511 517 521 521 630 644 667					I	I	

REFERENCE CTRY ID. CODE NO.	SHIP	LATITU	IDE	LONG	SITUDE SOUTH	MARS SOU	ARE		IDN T	ME 18,1/10	YEAR			ITATZ MUN	ÓΝ		DEPTH OT MOTTOR	DEP DS'M	TH	DB5		/E TID NS		WEA- THER CODE	CLDU CODE	5			NODC TATION TUMBER	
31 70	2 HU	4700		047	15 W	149	77	031	11	222	1966	T	01	6		10	638	0	6	22	3	4		x 3	3 9				0016	
221.0	-			1		1	WAT		, 1	WIND	_	-	A IR TE		c	-1	NO.	1			1-1	. 1	ľ	,,,,,	, - , -	,		ı	0010	
							COLOR	TRANS.	DIR.	SPEED	141.51	ER	DRY	w	EΤ	VIS.	OBS. DEPTHS		RVA	TIONS										
							CODE	im I	1	FORC		_	8018	BU	-	-	_	ļ												
									22	S 2 5	19	3	017			6	11						_							
	MESSENG TIME HR 1/10	of NO.	CA		DEPTH (m)	T	*c	s	٠/	\$1G	MA-T		CIFIC VOL		¥ 4 DYN	103 1. M. 103		UND DCITY	c	2 ml/l		04-P - 01/I		A L−P - a1/l	ND2-N ug - a1/		a1/1	\$1 04-5 pg - 01/		200
	711	_				1		<u> </u>									1		\top			_		\neg					1	7
	1	1	S	TO	0000	0	157	33	78	27	05	0	01023	34	00	00	14	547	, '		1		1			,			,	'
	22	2	08		0000	ū	157	33	776	27	05						14	547												
			S	TD	0010	٥.	269	34	32	27	139	0	00695	50	00	09	14	605												
	22	2	08	S	0010	0	269	34.	321	27	39						14	605	1											
			S	TO	0020		3 u 1	34	44		746	0	00632	29	00	15	14	622												
	2.2	2	08		0027		318		507		50						14	632												
				TO.	0030		322	34			751		00584	_	00			634												
			_	TD	0050		342	34			756	0	00536	4	00	33		647												
	22	2	OB		0055		346		634		757							650												
		_		TD	0075		351	34			758	0	00524	ė ÷	00	46		656												
	22	2	OB		0084		354		660		759					- 0		658												
				10	0100		361	34			761	U	00498	34	00	59		665												
	2.2	2	08	_	0111		366		724	_	762	_			0.0			669												
				TD TD	0125		372 380	34 34			763 765		00461		00			674												
	22	2	0B		0169		384		778.	-	765	U	00468	37	00	83		682												
	22	2		T0	0200		387	34			765	^	00473	. 1	0.1	06		693												
	22	2	08		10225		389	-	785		765	U	0047	2.1	0.1	00		698												
	22	4		TD	0250		392	34			765	0	00475	5.4	01	3.0		704												
				10	0300		397	34.			766		00470		01			714												
	22	2	ОВ		T0348	_	399	-	821	_	767		00110		-			723												
		_		TD	0400		397	34			767	0	00468	39	04	01		731												
	22	2	OB	S	T0466	U	395	34	829		768			-	,	-		741												
				TD	0500		398	34		_	768	0	00468	31	02	47		748												
	22	2	ОВ	S	0576	0	409	34	869	27	769						14	766)											

-	Tio	SHIP	LATITU	DF	LONGIT	LIDE	DC TR	MARS		STATE	DN TI SMTI	WE	YEAR	_	ORIGIN	_		- 1	TO	DEPTH	08	SERVA	VE ATIDNS		WEA-	CODES			NDDC STATION	
CODE	NO.	CDDE		1/10		1/10	25	10"	-			P.1/10		CRUISE NO.		ITATIO BM UN		8.0	OTTOM	OF S'MPL"S			PER S		CODE	TYPE AM	1		NUMBER	
31	702	ни	4659	-	0465			149	06 (1966	<u> </u>	01			+-	116	1		1-1		-						ĺ
1 3 4	1 102	1	40))	,,	0405	, "	1	14)	WAT			VIND	1900		AIR TE		- 1	1		03	24	2	3	- 1	X 1	8 3	1	1	0017	ì
									CDLOR	-		SPEED	BAR MET	۰ –	_		VI	IS I	NO. 085.		CIAL									
									CODE	Imi	DIR.	FORCE	1-1-		DRY ULB	BUI			EPTHS	DBSERV	ATIONS									
											22	S15	19	6 0	63	05	1 7		08			1								
		MESSENGR TIME HR 1/10	CAST	CAS		DEPTH (m}	τ	τ	s	٠/	SIGA	AA-T		C VOLU		₹ ∆ DYN. x 10	Μ.	SDU	OCITY	D2 ml/1		O4-P 1 - 01/I			NO2-N ug - a1/1	NO3=N pg - at/I	51 O4		S
						200					_					İ														\top
		0.36				0000			177	338		27		000	962	J	000	0		557										
		025	,	08.	_	0000			177	338		27								557										
		029		0B:		001			160	338		27		000	1953	1	001	0		560										
		025	,			002			181	339		27		0.00			00.			561										
				_		0030			210 246	340 342		27			846		001			577										
		029		0B:		003			2 46 255	342		27 27		000	746	Ţ	002	l		547										
		02.	,		_	005			291	344		27		0.0.	618	7	007	0		602										
		029		08:		006			310	345		27		000	010	1	004	U		623 635										
						007			311	345		27		001	570	h	005	5		637										
		0.25	,	08		0096			314	345		27		000	- 10		000			642										
						0100			317	345		27		000	554	9	006	Q		644										
						012			338	346		27			523		008			658										
		0.25		0B	S	012	7		340	346		27		000		_	000	-		659										
				S	TD	0150)		362	347		27		000	503	7	009	5		673										
		0.25	5	08:	S	0190)	0	387	347	66	27								691										
				S	TO	0200)	0	388	347		27		000	482	6	012	0		693										
				S	ŦΟ	0250)	0	39U	347	8	27			482		014			703										
		025	,	08	s T	025	2		390	347		27				_				703										

EFER	ENCE	SHIP				= 5	MA	RSDEN	5	TATION	TIME				ORIGIN	ATDR'S		DEPTH	MAX		WAY	VE LTIONS	WE		CLOU				NDDC
TRY DDF	10. NO.	CODE	LATITU	DE	LO	NGITUDE SE	10,	UARE 1°	MC	IGM		1	EAR	CRU N(TATIO NUMBE		TD BDTTON	0.5	0.0		PER SE	THI CO	ne l	TYPE A				UMBER
31	702	HU	4644		04	702 W	149	9 67	03	\top	05		966		01	8		1185	111	24	2	-	X	1	3	3			0018
		, ,					'	w.	ATER	+	WIN	D	BARC	1	AIR TE	MP. °C		NO.	Ϊ.,	ECIAL] `								
								COLD		ID 2M	R.	PEED OR ORCE	METE	۱ ۸	DRY BULB	W E T BULE		OBS. DEPTHS	Caren	VATIONS									
									7	1	_	10	19	5	036	03	7 7	10											
		MESSENGR		CAF	.0	DEPTH (m)	1	τ °C	Ť	s ·/.	T	SIGMA	. ,]		IFIC VOLU		≨ ∆ D DYN. M.		UND	D2 ml/	PI	D4-P	TOTAL	- 1	ND2-1	4 NO3	-N S	104-51	рН
		11ME HR 1/10	Y ND.	ŢYF	E	DEFIN ON						3,0,4,7		AN	OMALY-X	167	x 10 ³	VEL	OCITY	0,1	hå	* a1/I	اه ۰ و پر	71	µg - 01/	- פע	01/1 3	rg - ot/l	, , ,
					- 0]				1	2.7.5	_			1		1.,			1								i
		059	=	0B:		0000		0362 0362		3460 34591		275 275		0.0	0567	5	0000		647										
		05	,		D.	0010		0361		3460		275		0.0	0565	7	0006		648										
					ro	0020		0360		3460		275			0565		0011		649										
		0.55	5	OB:		0025		0359		3460		275							650										
					۲D	0030	(0360		3461		275	4	00	00561	7	0017	14	651										
				S	ΓD	0050	(0362		3461		275	4	00	00563	4	0028	14	655										
		059	5	08	S	0051	(0362		3460	9	275	4					14	656										
					D	0075		0366		3464		275			00546		0042		662										
					ΤD	0100		0373		3468		275		00	00525	1	0055		669										
		059	5	08		0102		0374		3468	4	275							670										
					10	0125		0386		3475		276			0502		0068		+6 BO										
		0.5			TO	0150		0396		3476		276		00	0492	6	0081		688										
		05	5	08		T0157		0398 0400		3477 3480	3	276 276		0.0	00471	,	0105		691										
					TD TD	0250		0400		3483		276			00455		0105		·708										
		059	_	0B:		T0263		0402		3483	1	276		0 (00499	4	0128		·710										
		05	,		7 D	0300		0402		3484	1	276		0.0	00451	,	0151		716										
		059	5	0B:		T 0 3 7 2		0398		3466	0	277		0 (JU JI	2	0.71		727										
		0,			τD	0400		0400		3486	•	277		0.0	00446	0	0196		732										
					r D	0500		0405		3485		276			00465	-	0241		751										
		059	5	OB:		0592		0410		3485		276		-			-		768										
					τō	0600		0408		3485		276		0 (00479	8	0288		769										
				S	TD	0700	-	0383		3487		277		0 (00446	7	0335	14	775										
				_	T D	0800		0366		3489		277	6	00	00422	1	0378	14	785										
		059	5	0В.	5	T0812		0364		3489	2	277	6					14	+786										
				S	τD	0900	4	0363		3489		277	6	00	00423	9	0420	14	800										
				S	τD	1000		0361		3490		277	6	U (00429	1	د4640	14	816										
		059	5	ОВ	S	1079		0360		3489	8	277	7					14	829										

EFER	ENCE	SHIP				-	. =	MARS	DEN	STA	ION TI				DRIGIN	ATDR'S		DEPTH	MAX.		WAV		WEA		rond		-	NOC	
RY	10.	CODE	LATITU		LONG	HUDE	NDCT	SOU	ARE		(GMT)	1	YEAR	CRUIS		TATIO		SOTIOA	, OF	1 00	SERVA'		THER		ODES			STATI	
DE	NO.			1/10		1/10	-	10*	1.	WO	DAY	R,1/10		NO.	<u> </u>	NUMBE	2	801107	N S.W. B.	S DIR	HGT 9	ER SEA	0000	119	LAM	1		14.0	D. K
31	702	HU	4701	N	046	30 W	- 1	149	76	03	12 0	86 1	966		01	9		0365	03	19	2 :	3	X 1	3	1 3		ļ	00	19
									WA	TER	٧	/IND	BARC	. L	AIR TE	MP. °C	- vis.	ND.	595	CIAL									
									CODE		DIR.	SPEED OR FORCE	M ETE (mbs		DRY BULB	BULE	COD	OBS. DEPTHS	CAREEN	ATIONS									
										Ţ	14	515	19	5 (39		6	09											
		MESSENGR TIME HR 1/10	CAST ND.	CAF		DEPTH (m	ı	Т	℃	5	٠/	SIGM	A-T		C VOLL		E △ 0 2 N. M x 10 ³		LOCITY	D2 ml/	1	4-P	101al-P pg - 01/1		12-N - at/1	ND3-N ug - al/l	\$1 D4= 99 - 01		рН
										1		1																	
					10	0000			377	34		274		000	0620	1	1000		+653										
		086	•	0B:	-	0000			377		547	274				_			653										
					TD	0010			378	34		274		000	1623	3 1	0006		655										
		086)	OB:		0012			378		545	274							+655										
				_	T D	0020			379	34		274		000	1623	3 1	0012		657										
		086)	OB:	_	0029			379		549	274							+658										
					TD	0030			379	34		274			0622		0019		+659										
					TO	0050			373	34		275		000	0601	1	0031		+660										
		086)	0B:		0056			372		580	275				_			+660										
					τD	0075			373	34		275		000	0595	5	1046		+664										
		086	5	08		0085			373		584	275							6666										
					T D	0100			372	34		275		000	3593	5	0061		+667										
		086)	OB.		0114			370		590	275							+669										
					TO	0125			375	34		275			0581		0075		+673										
					ŢΟ	0150			367	34		279		00	3558	5	0000		4683										
		086	5	08		0171			396		707	275							+691										
					TΟ	0200			410	34		276		000	0481	9	1116		4703										
		086	5	OB.		T0228			416	34	859	27€							+711										
				5	TD	0250		0	4Ú8	34	86	276	9	000	J438	0	139	14	+711										
				5	TD	0300	,	0	391	34	67	277	2	00	0417	2	160	14	+713										
		0.86	5	ОВ	S	0341		0	377	34	881	277	4					14	713										

REFERE	NCE	SHIP				- =	MAR			TIDN T				ORIGIN	ATOR	·s]	DEPTH	MAX		WAVE	WEA-	CLOUD			NODC	
CTRY	ID. NO.	CODE	LATITI	1/10	LDN	IGITUDE DE S	10.			(GMT)	IR.1/10	YEAR			TATIO		8	TO IDTTDM	OF S'MPL'	1 00	THGT PER SE	THER	TYPE AM			TATION	
	702	1 40.1	4700		0.4	610 W	149	-				1966	+	02			+	301	03	1	1.		1		- +		1
31	102	HU	4 / 0 0) (1	04	DIO W	147	WA		_	WIND	1	<u></u>	AIR TE		· T	+		0.5	1 11	2 3	X 3	5 8	I	1	0020	i
								COLOR	7	+-	SPEEC	BARG		DRY	WE		ris.	NO. OBS.		CIAL							
								CODE	imi	DIR.	FORC	1		BULB	BU	.8	ין	OBS. DEPTHS	OBSERV	AIIUNS							
										12	518	17	3	044		7	7	09									
		MESSENGE TIME HR 1/10	O NO.		RD PE	DEPTH (m)	T	°c	s	٠/	SIG	MA-T		CIFIC VOLU		₹ ∆ DYN. x 1	м.	SOU		O2 ml/	PO4-P 29 - 01/1	10TAL-P ug - at/1	NO ₂ =N ug - o1/l	NO ₃ -N μg - οί/Ι	\$1 D4~\$		s
				+-			1		+									1									_
		I	1	' s	TD	0000	0	390	34	53	27	44	0	00647	ο	000	00	146	658		1 1	'	'			1	
		09	6	08	5	0000	0	390	34	528	27	44						146	658								
				-	TO	0010		390		53		45	0	00645	6	000)6		660								
		09	6	08	-	0010	_	340		531		45							660								
		0.0	,	_	TD	0020		390		53		44	0	00647	3	001	1.3		661								
		09	6	08	TD.	0025		390 390		524 53	-	44	0	00651	2	001			662								
					TD	0050		300		54		44		00646		003			663 666								
		0.9	6	08		0050		390		535		45	0	00040		00.	<i>J L</i> ,		666								
					TD	0075		381	_	57		4.8	0	00616	8	0014	8		667								
		0.9	6	0.8	5	0076	0	381	34	567	27	48						146	667								
				S	TD	0100	0	373	34	62	27	53	()	00570	5	006	53	146	569								
		09	6	08		0101		373	34	627	27	54						146	669								
					TD.	0125		391		68		56	_	00545		007			681								
					1D	0150		406		74		159	0	00517	В	009	0		592								
		0.9	6	08		0151		407		743		60			_				693								
		0.0	,		TD	0200		428		86	_	67	0	00455	7	01)	15	14									
		0.9	0	08	TD	T0203		429 396		865		67 71	_	00410	-	010			712								
		09	6	08		0250		391		87 871		71	U	00419	1	013	96		706 705								
			-		_						۵,																

REFERENCE CTRY ID.	SMIP	LATITUE	DE.	LONGITUDE	DRIFT	MAR		STATION		YEAR	CRUISI	ORIGIN	ATDR'S		DEPTH TO	MAX. DEPTH	01		A V E	s	WEA- THER	CLDUD		S1	NODC ATION
CODE NO.	0000		1/10	1/10) Z	10*	1,	MO DAY	HR,1/10		NO.		JUMBER		BOTTOM	S'MPL"	DIA	H G	T PER	A 3 2	CODE	TYPE AM	1	N	UMBER
31 702	P HU	4719	N	04610 W		149	76	03 12	125	1966	,	02	1		0640	0.5	30) 2	3		Х6	5 8			0021
							WAT	ER	WIND	BAS	10-	AIR TEN	W.P. *C	Τ.	NO.		CIAL	٦' .				_		·	
								TRANS. DI	SPEE	MET	ER	DRY	WET	CODE	OBS. DEPTHS	OBSERV		s							
							CODE		FOR	-+-		BULB	BULB	+				4							
								1	52	2 14	16	150	L	3	11	L.,		Ц,						,	
	MESSENGR TIME HR 1/10	of NO.	CARD		(m l	Ţ	*c	s 1/4.	SIC	GMA-T		C VOLU	42 I D	ΔD YN. M X 10 ³		DCITY	O₂ ml	Δ.	PO4-P ug • q1/			NO3-N µg - ai/l	NO3-N pg - at/1	SI D4~Si µg + at/l	рН
										_															
	*		51			0	347	3451	2	747	000	617	5 0	000	14	640				•					
	125		OBS				347	3451		747					14	640									
	125	5	OBS				347	3451		748						641									
			ST				347	3452		748		1615	_	006		641									
			ST				348	3452		748	000	1616	7 0	012		644									
	125	5	085				349	3451		748						645									
			ST				354	3454		749		0606		018		648									
	1.24	_	ST				368	3461		753	000	1568	5 0	030		658									
	129	5	OBS				368	3461		753						658									
	1.24	-	51				366	3462		754	000	0561	3 0	044		662									
	12	5	085 51				366	3462		754				3 5 0		662									
	129	_	085				380	3468		757	000	1532	4 0	058		672									
	12)	51				381 382	3468	_	758	0.0					673									
			ST	_			383	3472		760		1509		071		678									
	129		085				383	3475		762 763	000	1489	8 0	083		683									
		-	ST				384	3479		765	000)467	7 0	107		683 694									
	129	5	OBS				390	3479		766	000	7401	, ,	101		695									
			ST				400	3485		767	000	454	a n	130		708									
			ST				412	3486		768		1448		153		721									
	125	5	085				413	3486		768	000		- 0			723									
			ST				403	3488	-	771	000	436	4 0	197		734									
	125	5	OBS	1041	2	0	402	3487		771			·			736									
			ST	0 050	0	0	393	3489		773	000	1425	3 0	240		747									
	125	5	OBS	051	. 7	0	391	3489	2	773				_	14	749									

RE	NCE	SHIP	LATITUD	F	LON	GITUDE	L E	MARS			TION TIA		EAR		ORIGINA			DEPTH	MAX	OB	WAVE		WEA-	CLOU		- T	NODC
	ID. NO.	CODE		1/10		1/10	DRIFT IN OCT	10'			DAY HR			RUISE NO.		ATION LIMBER		BOTTOM	S'MPL	1	HGT PE		CODE	TYPE A			TATION
t	702	HU		N	0.44	610 W		149	1	-			066					1007	+	1	+ +-	1 16-	_				
1	102	110	4140	. 1	0 4	010 %	1 1	147	WAT	-		NO 1	966		022		, 1	1097	10	13	4		X 7	5 5			0022
								-	COLOR	_	—	SPEED.	BARO- METER	_	DRY TEM	WET	VIS.	NO.		CIAL							
									COOE	Im!	DIR	OR	(mbs)		ULB	BULE	CODE	DEPTHS	OBSERV	ATIONS							
								- 1			13	520	125	10	39		5	13									
		MESSENGR TIME (CAST NO.	CAR		DEPTH	(m)	T	°C	2	•/	SIGMA	A - T		C VOLUA	; D	Δ Q YN. M x 10 ³		UND	O 2 ml/	POA		TOTA L-P µg = a1/1	NO2-N			
	- 1	HR 1710	1	-				1		+			-			+		-			+	\rightarrow			+	-	-
			1	_	TD	000	n	. 0	373	34	50	275	, 1	000	5914	١ _	000	1,	(6)		1				1		
		150		08		000			373		580	275		000	2714		000		652								
		150		OB:	_	000			372		574	275							652 653								
					T D	001			372	34		275		000	5960		006		653								
					TO	0021			373	34		275			5960		012		655								
		150		OB:		002			373		577	275	_	• • •	- / 0 0				655								
				S	TD	003			374	34		275		000	5950	0	018		657								
		150		OB:	5	004	5	0	375	34	582	275	0						660								
				S	TΟ	0051	0	0	375	34	59	275	0	000	5940	0	030	14	661								
		150		OB.	S	006	8	0	375	34	597	275	1					14	664								
				S.	TD	007	5	0	378	34	63	275	4	000	5653	0	044	14	667								
		150		08:	S	009	1	C	352	34	697	275	9					14	672								
				S	TΟ	010	Û	0	383	34	70	275	9	000	5195	0	058	14	674								
				S	TΟ	012	5	0	384	34	73	276	1	000	5010	0	071	14	679								
		150		0B;	5	013	6	0	385	34	742	276	2					14	681								
				S	T O	015	0	0	402	34	78	276	3	000	4837	0	083	14	691								
		150		OB:	5	T018		0	426	34	642	276	5					14	707								
				_	10	020			417	34		276		000	4571	. 0	106	14	707								
					TΟ	025			399	34		276		000	4408	0	129	14	707								
		150		06		1027			393		847	276							709								
					10	0300			390	34		277		000	4331	. 0	151		712								
		150		OB:	_	10354			385	-	857	277							719								
					10	0400			361	34.		277.			4254		194		725								
		160			T D	0500			374	34		277		000	4195	0	236		738								
		150		OB:		1054			372		878	277							744								
				S:		0600			370	34.		277			4159	_	278		753								
		150		_	10	0700			366	34		277		000	4172	0	319		768								
		150		089		10736			364		887	277		000		_			774								
				_	TD.	0800			361	34		277			4165	_	361		783								
		150			19	0900			356	34.		277		000	4192	0	403		797								
		150		089	>	096	T	U ;	353	34	895	277	1					14	806								

	HIP	LATITU	DE 1/10	LON	GITUDE	DRIFT	MARS SQU		72 0 M	ATION (GMT	TIME) HR,1/10		EAR	CRUISI NO.		STATI	ON	-	DEPTH TO SOTTOM	MAX, DEPTH OF S'MPL*	1		VE ATIONS		WEA- THER CODE	CLOUE CODE	5		STATE	ON
31 702 1	411	4756		041	010 W	П	149	76	03	12	175	11	966		0.2	3		1	1097	10	15	2	3		x 7	5 8			00	23
311 1021	.0	4150	14	0 ,) I O II		1 , ,	WA		_	WIND	-			AIR TE		c T	т,	NO.		,	12	13 1	1	^ /	1 2 0	1	,	00	20
								COLOR				ı I	METE	R	DRY BULB	BU	ET (VIS.	OBS.		CIAL									
								CODE	lm	13	FOR S S O	$\overline{}$	10	_	33	1 80	-	5	14	-										
	SSENGE TIME	CAST NO.	CAI		DEPTH	lm I	Т	*c		s •4.	+	GMA		SPECIFI	C VOLU		₹ / DYN	↑ N. M. 103	sot	UND	O2 ml/1		PO4-P		TA L — P	NO2-N µg - al/l	NO3-N yg + at/			ρН
-							_												T							-	İ			_
			5	TD	000	0	0	370	3	454	′ 2	74	8 '	000	0616	5 '	00	00	14	650		1		1	'		'	1		
	17	5	OB		000			370	3	4543		74								650										
	17		ОВ		000			371	3	4566		74								652										
				TO	001			371		457		75		000	1597	9	00	0.6		652										
				T D	002		0	371	3	457		75		000	599	1	00	12		654										
			5	GT	003	0	0	372	3	457	2	75	0	000	600	3	00	18	14	656										
	17	5	08	5	004	7	0	372	3	4578	3 2	75	0						14	659										
			5	ΤD	005	0	0	372	3	458	2	75	0	000	1596	5	00	30	14	659										
	17	5	08	S	007	0	Ú	373	3	4578	3 2	75	0						14	663										
			5	T D	007	5	0	375	3	458	2	75	0	000	598	2	00	45	14	664										
	17	5	08	5	009	4	0	374	3	4593	3 2	75	1						14	668										
			5	TD	010	0	0	376	3	461	2	75	2	000	0580	6	00	60	14	670										
			S	TD	012	5	0	382	3	468	2	75	7	000)536	2	00	74	14	677										
	17	5	08	5	014	1	0	383	3	4703	3 2	75	9						14	681										
				TD	015		0	380		471		76	0	000	1514	0	00	87	14	681										
	1.7	5	08	S	018		0	3.75	3	4719	2	76	1						14	685										
				T D	020			382		472		76		000	0513	0	01	12	14	690										
			5	10	025			405		472		75		000)541	4	01	39	14	708										
	1.7	5	0.8	5	T028	9	0	411	3	4745	2	75	Q						14	717										
				TΟ	030		0	407		476		76		000	0518	4	01	65		718										
	17	5	08		T038			386		4865		77								724										
				T D	040			365		487		77)422			12		726										
				TD	050			378		487		77		000) 4 2 3	9	02	55		740										
	17	5	0.6		T057			374		4877		77								751										
				TD	060			373		468		77			0419			97		755										
				TD	070			370		489		77		000	0418	10	03	39		770										
	17	5	08		T077			367		4894	_	77								781										
			_	TD	080			366		489		77			1419			81		785										
				TD	0.30			301		489		77		000)422	0	04	23		800										
	17	5	08	S	099	4	0	355	3	4893	3 2	77	7						14	813										

IO.	SH	HIP DE	LATITU	0E 1/10	LON	GITUDE	DRIFT	SQU			ION T		YEAR	CRUIS		TATIO		DEPTH TO OTTOM	MAX, DEPTH OF	UB.	WAVE SERVATION	ONS	WEA	2	COOES	1	5	NODC
	2 H	11.1	4820	_	13.6		-	10*	· · ·		OAY H			NO	_	UMBE		-	S'MPL"	DIR.	HGT PE	R SEA	COD	71	PE AM	1		UMBER
10	٠١ ١١	0	4020	in 1	04	510 W		149	86				966		024]]	1097	11	03	3 3		X 7		5 8		1	0024
								-	WA		V	SPEED	BARC		AIR TEA	AP. °C	vis,	NO.	SPF	CIAL								
									CODE	TRANS Im:	DIR.	FORCE	METE	1	DRY BULB	BULB	CODE	OBS. OEPTHS		ATIONS								
					-					ļ .	19	515	0.89	B (220		3	13										
	71	SENGE IME o	CAST NO.	TYP		DEPTH (m)	Ť	°c	\$	٠/	SIGM	A-T		IC VOLUA	ME C	E △ D IYN. M. X 10 ³	SOF.	CITY	0 2 ml/l	PO4-		TO TA L = : μg - ot/f		02=N - al/l	NO3-N µg = a1/1	\$1 O4 \$1 µg - a1/1	
					_																	\top				-		
		199		S.		0000			56	34		275		000	05415	> 0	000	146	545			'					1	•
		Idd		08	_	0000			56		525	275						146	545									
		199		S.		0010			60	34		275		00	05288	3 Ç	005	146	549									
		144		083		0010			60		548	275						146	549									
		199		51		0020			64	340		275		000	05282	2 0	011	146	552									
		194		089	-	0025			65		559	275						146	553									
				51		0030			66	340		275			05268	_	016	146	554									
		199		.51		0050			68	346		275		000	15306	> 0	026	146	559									
		199		083		0075			68	346		275						146										
		199		089		0077			72	346		275		000	15294	• 0	U40	146										
		1) 4		51		0100			85	346	72	275				_		146										
		199		089		0104			86	34	-	275		000	15144	• 0	053	146										
				51		0125			87	34	_	276		000			0.15	146										
				ST		0150			88	34		276 276)4960)4843		065	146										
		199		085		0156			88	34		276		000	4043	, U	U 78	146										
		- ,		51		0200			81	34		276		000				146										
		199		085		T0208			90	347		276		000	4745)	102	146										
		-		ST		0250		03		347		276		000	4.722		125	146										
				5.1		0300		03		348		276			14723 14661		125	147										
		199		OBS		T0312		03		348	-	276		JUL	4001	U	149	147										
				ST		0400		03		348		276		000	14657		195	147										
	j	199		085		0416		03		348		276		000	-051	U	190	147										
				ST		0500		03		348		277		000	4551	0	241	147										
				ST		2600		03		348		277			4549	-	287	147										
]	199		085		10625		0.3		348		277		500	4J47	U	-01	147										
				ST		0700		03		348		277		000	4479	0	332	147										
				ST	D	0800		03	81	348		277			4393		376	147										
	1	199		085		0832		03		348		2775		500		U	- 10	147	-									
				ST	D	0900		03		348		277		000	4359	0	+20	148										
				ST	D	1000		03		349		2776			4391	_	+64	148	-									
		99		085		1059			67		95	2776		000	マンフェ	0	704	440	2 U									

REFER	ID.	SHIP	LATITU	IDE	LONG	ITUDE	DC	MARS		STATIO	N TIA		YEAR	Canize		ATOR'S		DEPTH TO	MAX. DEPTH	085	W A VE		WEA-	CLOUC		S	NODC
300	NO.	CODE	•	1/10		17/10	° z	10*	1.	MO DA	Y HR	1,1/10		NO.		NUMBER		BOTTON	S'MPL	S DIR.	HGT PE	R SEA	CODE	TYPE AM	T	٨	NUMBER
31	702	HU	4835	N	046	10 W	1	149	86	03 12	2 2	24 1	966		02	5		2012	13	04	6 4		X 7	5 8			002
									WAT	ER	w	IND	BARC)-	AIR TE	MP. C	VIS.	NO.	C P E	CIAL							
									COLOR	TRANS (m)	OIR.	SPEED OR FORCE	(mbs		DRY IULB	BULB	COD	DEPTHS	OBSERV	ATIONS							
	_									1	19	517	07!	5 0	17		6	13									
		HESSENGE TIME HR 1/10	NO.	CAR		DEPTH (m}	ī	°c	۶ - ۱	٠.	51G M	A-T		C VOLU	ME 07	∆ D YN. M X 10 ³	. VEL	OCITY	02 ml/l	PO.		TOTA L-P µg - a1/I	NO2-N ug - at/l	NO3-N yg - ai/l	\$1 O ₄ - 5: yg - a1/	
																											ĺ
				51		0000			391	3474		276		000	489	9 0	000		661								
		224	+	OBS		0000			391	347		276		0.00		2 -	00-		661								
		224		S1 0B9		0010			398 398	3476	-	276		000	484	2 0	005		666								
		224	*	V 5 1		0020			398 398	3475		276 276		000	486	7 0	010		666 668								
		224	4	089		0026			398	3479		276		000	400	1 0	010		669								
				51		0030			398	3475		276		nnn	488	6 0	015		669								
				51		0050			399	3476		276			487		024		673								
		224	4	089		0052			399	3475		276		•••			V L .		674								
				51		0075	5	0	399	3476		276		000	488	4 0	037		677								
		224	+	089		0079)	0:	399	3476	50	276							678								
				S 1	0	0100)	04	400	3476	5	276	2	000	488	7 0	049	14	682								
		224	+	083		0100			400	3476		276	2					14	683								
				51	D.	0125		0	393	3471	7	276	3	000	481	2 0	061	14	683								
				51		0150			388	347		276		000	475	5 0	073	14	685								
		224	+	OBS		0158			387	347		276							686								
				51		0200			394	348		276		000	457	8 Q	096		646								
		224	*	089		0211			396	348		276							699								
				S1		0250			396	3483		276			449		119		706								
				51		0300			396	3485		276			439		141		714								
		22.		S1 089		0400			396	3488		277		000	426	6 0	184		731								
		224	+	51		10422 0500			396 389	3488		277		000	4.30	0 0	127		735								
				51		0600			382	3489		277			420		227		745 759								
		224		089		T0636			379	3489		277		000	722	4 0	£ 0 7		763								
			•	51		0700			375	3489		277		000	420	6 0	311		772								
				51		0800			369	3489		277			422		353		786								
		224	4	OBS		T0850			366	3489		277				_	- / /		ر د 79								
				51	0	0900)	03	363	3490		277		000	422	8 0	396		801								
				5 1	0	1000)	0.	357	3490)	277			422		438		815								
		224	4	OB.	5	T1082	2	0;	353	3490	12	277							827								
				51	D	1100)	0	352	3490)	277		000	420	7 ن	480		829								
				51	D	1200		0.2	349	344	1	277	9	000	416	3 0	522		845								
		220	4	089	5	1276	,	0 3	348	3492	25	278	0						858								

TABLE IV. Observed and interpolated oceanographic data taken by USCGC EVERGREEN on North Atlantic Standard Monitoring Sections 2, 3, 4, 5 and 6, 25 October, 13 November 1966; prepared from NODC listing No. 31-8007.

TRY ID.	CODE	LATITU	DE LOP	ACITUDE PRINTED	MARSI SOUA		STAT	ION TI		YEAR	CRU		TATIO	N	OEPTH TO BOTTO	DEPTI		WAVE SERVATION		R CO	2301		2	NODC
DDE NO.			1/10	1/10	10"	1,	MO I	DAY HE	1,1/10		N	0. N	UMB	R	801107	S'MPL	'S DIR	HGT PER	SEA COU	TYPE	AMT		N	UMBER
318007	ĒV	3505	N 07	506 W	116	55	10	25 0	29 1	1966		0.2	0		0545	ون اذ	36	11/2/	l x	1 0	3			0031
					ľ	WAI	TER	T w	IND	BARO	Т	AIR TEN	AP. °C		NO.	T		, ,	,	- 1		'	,	000.
						COLOR	TRANS,	OIR.	SPEED	METER	:	DRY	WEI		QBS.	OBECO	ECIAL VATIONS							
					L	CODE	(m)	UII.	FORCE	(mbs)		BOFB	801	В	DEPTHS									
						DT	SD	35	512	186	5	217	21	1 8	24									
	MESSENGE	T			T					<u>' T</u>				5 A n	Τ			T	1	Τ.				
	TIME	OI NO.	CARD	DEPTH (m)	1	"C	2	٠/	SIGM	A-T		OMALY-110	ME	₹ A O	. VFI	OCITY	02 ml/	PO4-P	TOTAL-			NO3-N	\$1 O4 - \$1 yg - at/1	ρН
	HR 1/10	-			-		₩		-		_			x 10 ³	1			-	24			µg - o1/l	py - 011 /	
	1																							
			SID	0000		558	35		238		0	04037	5	0000	1.5	372								
	0.2	9	OBS	0000		558		917	238						15	372								
			STD	0010		558	35		238		0	04042	3	0040	1 :	374								
			OBS	0010		558		916	238						1 5	374								
			STD	0020		544	35		239		0	04005	2	0081	15	372								
	0.0	1	OBS	0020		544		916	239							372								
			OBS	0025		20		936	240							368								
			STD	0030		+78	35		241		01	03784	3	0120		359								
			OBS	0030		478		961	241							359								
			085	0035		340		036	246							327								
			STD	0050		295	36		249		0	03048	6	0188		321								
			OBS	0050		295	36	276	249	93					1 5	321								
			STD	0075		987	36	36	258		0	02187	9	0253	1 5	246								
			OBS	0075		987	36	356	258	35					1 5	246								
			STD	0100	16	599	36	24	264	+9	01	01588	7	0301	15	167								
			OBS	0105	16	562	36	215	265	5 5					15	156								
			STD	0125	15	86	36	10	266	54	01	01446	3	0339	15	135								
			085	0125	15	86	36	099	266	54					15	135								
			STD	0150	1 5	507	35	92	266	8 6	01	01416	7	0374	1.5	112								
			OBS	0150	19	07	35	916	266	8 6					1 5	112								
			085	0188	13	368	35	806	268	39					15	072								
			STD	0200		257	35		269	99	01	01130	6	0438	15	035								
			085	0200		257		636	269	9					15	035								
			OBS	0225		181		521	270)5					15	012								
			STD	0250		67	35		271	13	00	00997	7	0491	14	974								
			0BS	0250		67		361	271	13					14	974								
			OBS	0285		987		225	271						14	949								
			STD	0300		909	35	14	272	2.3	00	009109	5	0539	14	921								
			OBS	0300		909	35	136	272	23					14	921								
			OBS	0350		310	_	061	273	3 3					14	891								
			OBS	0380		300		115	273	8 8					14	893								
			STD	0400		733	35		274		0 (00707	7	0620	14	870								
			OBS	0400	07	733		074	274	5					14	870								
			OBS	0435		546		055	275						14	841								
			OBS	0475	04	+88		961	276	8					14	783								
			SID	0500	04	08+	34	96	276	8	00	004759	9	0679	14	784								
			OBS	0500	04	08+	34	956	276	8					14	784								
			OBS	0540	04	+72	34	955	276	9					14	787								

NCE SHIP	LATITU	DE I	ONGITUDE HO	MARSDEN SDUARE	STATION THE	ME	YEAR	CRUISE		ATOR'S TATION		GEPTH TO	MAX. DEPTH	085	WAVE SERVATIONS	WEA-	CLOUG		\$1	100C
NO. CODE	·	1/10	ONGITUDE NO		MO DAY HE	3,1/10		NO.	N 2	UMBER		BOTTOM	OF S'MPL'S	DiR.	HGT PER SEA	COOL	TYPE AM1	1	N	UMBER
1007 EV	3449	-	7435 W	116 44			1966		02	1		3035	13	33	3 2	×1	0 3			003.
,00,1 = 4	2,4,	.,		WAT		INO	BARG	TA	IR TEA		Τ,	NO.	1		1-1-1	1	1 013	1	1	005.
				COLOR	TRANS. OIR.	G3392	METE	R D	IRY	WET	CODE	OBS.	OBSERVA	TIONS						
				CODE	Imi Oik.	FORCE	(mbs	1 BL	JLB	BULB	-	DEPTHS								
				DT	SD 01	518	20	7 2	44	222	7	29								
MESSENGR	CAST	CARO		7 °C	s ·/	4.4		SPECIFIC	VOLUE	ME S	Δρ	sou	ONL	0 2 ml/1	PO4-P	TOTAL-P	NO2-N	NO3-N	S1 O4=S1	
TIME 1/10		TYPE	DEPTH (m)	, ,	,	3167	MA-T	ANOMA	ALY-X10	, 0	∆ D YN. M x 10 ³	, AETO	CITY	0 2 miz i	μg = σt/l	1/10 - وبر	υg = αI/I	yg - 01/1	μg - σ1/1	рН
11.1.1.1.1.1				-																
ı		STD	0000	2665	3607	23	66	004	244	7 0	000	1 15	398		1	'			1	
0.7	1	085	0000	2665	36074	23	66					15	398							
		STE		2669	3606		64	004	269	6 0	043		400							
		OBS	0010	2669	36062	23							400							
		STD		2669	3606		64	004	273	8 0	085		402							
00	2	OBS	0020	2669	36062		64						432							
		OBS STE	0025	2665 2661	36063 3607		65	004	251	5 0	128		402							
		085	0030	2661	36065		67	004	271) (120		402							
		STO		2652	3607		69	004	232	6 0	213		403							
		085	0350	2652	36065		69						403							
		STE	0 0075	2648	3612	2.3	75	004	192	1 0	318		407							
		QBS	0075	2648	36119	23	75					15	407							
		085	0085	2580	36300	24	10					15	395							
		OBS	0090	2598	36383		10						401							
		STE		2555	3643		27	003	703	0 0	417		393							
		OBS	0100	2555	36427		27	003	1 1) (0.0		393							
		STE		2411	3658		82	003	186	3 (1503		365							
		0BS 5T0	0125	2411 2286	36578 3670		82	002	754	0 0	577		365							
		085	0150	2286	36704		29	002	1)4	7 (1211		340							
		OBS	0170	2203	36745		55						323							
		STO		2074	3671		89	002	200	0 0	701		294							
		OBS	0200	2074	36712	25	89					15	294							
		STE		1926	3656		16		951		805		260							
		STE		1752	3634		43	001	709	2 (1896		216							
		085	0300	1752	36336		43						216							
		STE		1323	3570		91	001	266	2 1	045		091							
		08s 510	0400	1323	35701 3544		91	001	069	, 1	162		091							
		085	0500	1107	35440		12	001	069	0 1	+02		030							
		OBS	2560	0916	35155		23						967							
		ST		0879	3515		29	000	914	2 1	261		960							
		085	0600	0879	35146		29				- 0 2		960							
		OBS	0630	0870	35108	27	27					14	961							
		085	0678	0761	35026		3.7						926							
		STO		0766	3504		3.7	000	835	3 1	349		932							
		OBS	0700	0766	35036		3.7	0.00					932							
		STI OBS	0800	U553	3504		66	000	545	3 I	418		864							
		065	2650	0491	35026		73						864							
		ST		0491	3533		73	900	477	4 1	469		855							
		085	0900	0491	35034		773	500					855							
		ST		0448	3500		76	000	456	1 1	515		854							
		085	1000	0448	35003		776						854							
		STI		0427	3500		778	000	444	8 1	560		862							
		OBS	1100	0427	34996		778						862							
		STI		0415	3499		779	000	440	3 1	.00		871							
		083 STI	1200	0400	34986 3498		779 779	200		1	m		871							
		085	1300	0400	34983		779	900	409	U	049		884							
		003	1300	0400	24702	6	13					1.4	884							

CODE	LAT	TITUDE		NGITUDE PROCES	M A R	ARE		ION TIM	۲	EAR	CRUIS		TATI	ON	DEPTH TO BOTTOW	MAX DEPTI	H OB:	WAVE SERVATION:	1	WEA- THER	CLOUD			NODC TATION	4
		1/10		17.10	10"	1		DAY HR.	-		NO.	-	UMI	BER		2.Whr	+	HGT PER	EA.	.000	TYPE AM	 		AOWRE	4
7 EV	34	36 N	0 1	7408 W	116			25 1		966	1_	0.2			3658	1 1 5	5 33	1		X 1	0 3			003	3
						COLOR	TRANS.		SPEED	BARG		AIR TEA	WE	VIS.	NO. OBS.	SP	ECIAL								
						CODE	Im!	D1R.	OR FORCE	(mbi	iî	BULB	BU		DEPTHS	ORZER	VATIONS								
						DT	50	03	506	16	6	240	2.	20 7	26										
MESSENG	8 CA	CT C	ARD					•			585715	IC VOLUM		₹ △ D	1	UNO		PO4-P	TOTA		NO2-N	NO 11	\$104-5	1	_
HR 1/10	TNO	5. T	YPE	DEPTH (m)	, T	℃	2	٠/٠.	SIGMA	-T	AND	MALY-II	3,	₹ △ D DYN. M x 10 ³		OCITY	O 2 m1/l	νg • 61/1		01/1	ug - 01/1	NO3-N ug - at/l	μg - σ1/		,
17.10	+	+					+			_			\dashv		+			+	1	\neg				1	_
1	1	1	STO	0000	2	695	36	υ7 ¹	235	6	00	4338	9 1	0000	1 1 5	405	l	ı	1	- 1	1		l	1	
10	1		BS	0000		695		ū 70	235							405									
			STD	0010		695	36	07	235	6	00	4343	1	0043	15	406									
			BS	0010		695		070	235							406									
	_		STO	0020		695	36		235		00	4347	3	0087		408									
0.0	2		35	0020		695		070	235							408									
			BS STD	0025		695	36 36	070	235		0.0	1.25 +	,	0133		409									
			510 35	0030		695		070	235		00	4351	4	0130		410									
			STO	0050		695	36		235		0.0	4359	8	0417		413									
			35	2050		695		070	235		- 0	/	_			413									
			STD	0075	2	695	30	07	235	6	00	4370	2	0327	15	417									
			35	0075		695		J70	235							417									
			5 T O	0100		560	36		242		00	3755	2	0428		394									
			BS STD	0100 0125		452	36 36	375	242		0.0	2210		0-17		394									
			35	0125		452		556	246		00	3319	1	0517		375									
			STD	0150		254	36		254	-	0.0	2646	1	0591		333									
		01		0150		254		733	254		00		•	0,,1		333									
			3.5	0160		171		753	256							313									
			STD	0200		200	36		260		00	2030	5	0708		274									
			35	0200		000		683	260							274									
			STO	0250		884	36		262		00	1832	9	0605		249									
			3 S 5 T O	0260 0300		869 839	36	575 57	263 263		0.0	1749	,	0894		246									
		0		0300		839		568	263		00	1149	4	0094		244									
			STD	0400		758	36		265		00	1657	3	1065		236									
		01		0400		758		474	265		-			100		236									
			STD	0500	1	689	36	35	265	9	00	1621	5	1428		230									
		0	35	0500	1	689	36	345	265	9					15	230									
			STD	0600		46Ū	35		268	0	00	1430	2	1381	15	171									
			35	0600		460		944	268				_			171									
			STD BS	0700		188	35	56 555	270		00	1165	7	1512		092									
			5 T D	0800		957	35		272	-	0.0	1007	B	1622		092									
		01		0800		957		251	272		00	1007	0	1022		023									
			STD	0900		743	35		274		00	0796	7	1712		957									
		0	35	0900	0	743	35	∪86	274	5					14	957									
			5T0	1000		590	35		276	2	00	0613	4	1782	14	912									
		01	_	1000		590		048	276							912									
			5T0	1100		518	35		277		00	0533	5	1840		900									
		01	35 310	1100 1200		518 467	35	038	277		0.0	04.00	α .	1401		900									
			35	1200		467		018	277		00	0490	D	1891		895									
			510	1300		450	35		277		0.0	04751)	1939		905									
			35	1300		450		023	277		0.0		_	1.27		905									
			STD	1400		434	35		277		00	0469	6	1986		915									
		08		1400		434		015	277	_						915									
			510	1500		412	35		278		00	0460	Ü	2033		923									
		01	35	1500	0	412	35	001	278	0					14	923									

REFERENCE	T T				_ =	MARSOEN	STATION TI	ME I			ORIGIN	ATOR'S		OEPTH	MAX.		WAVE	WEA-	CLOUG			100C
CTRY IO.	CODE	LATITU	OE	LONGITUDE	ORIFT INDCTR	SOUARE	(GMT)		YEAR	CRUISE	S	TATION		TO BOTTOM	DEPTH		SERVATIONS	THER	CODES		S1	ATION UMBER
COO! NO.			1/10	1/10	-	10" 1"	MO DAY H			NO.		10 W BER			S'MPL'S	OIR	HGT PER SEA	COUR	TYPE AMI	1	- 14	OWREK
31 8007	EV	3421	. N	07338 V		116 43		41	1966		0.2			3931	15	09	2 3	X1	0 3	1	ļ	0034
						WA		IND	BARO		IR TE/	WET	vis.	NO.	SPEC	IAL						
						COLOR	TRANS. DIR.	FORCE	WELE		JL8	8ULB	COOE	DEPTHS	OBSERVA	TIONS						
						DT	SD 08	504		6 2	50	222	8	25								
	MESSENGE		CARC			T '	1	T		SPECIFIC	1/0/14	\$	Λn	1,0	JND T		100 0 1					,
	MESSENGR TIME	NO.	TYPE		(m)	ī °C	s ·4.	\$1G	MA-I	ANOM	ALY-XI	Ö' DY	△ D. N. M. 10 ³	. VELO	CITY	0 2 ml/1		OTA L = P	NO2-N µg - al/l	NO3=N 1/1a - gu	\$1 O4-\$1 \doldar\dolda	рн С
	HR 1/10						+	-	-					+			+			-		-
			SI	000	0.0	2401	3634	24	67	003	276	7 0	uoo	15	340				,			- 1
	141	l	085			2401	36343		67		0				340							
			ST	0 00	0	2388	3634	24	71	003	244	6 0	033	15	338							
			0B\$			2388	36342		71						338							
			51			2380	3634		74	003	226	8 0	065		338							
	002	2	OBS			2380	36341		74						338							
			085 ST			2380 2380	36341 3634		+74 + 7 4	003	230	o ^	097		339 340							
			089			2380	36341		.74	003	230	0 0	u y 1		340							
			51			2380	3634		73	003	239	5 0	162		343							
			OBS		0	2380	36340		73						343							
			51			2380	3634		73	003	249	5 0	243		347							
			OBS			2380	36340		73						347							
			0B5			2380	36341		74	003	21.	0 0			349							
			51 085			2125 2125	3664 36642		69	002	346	0 0	313		290 290							
			51			1985	3668		10	001	970	6 0	367		257							
			085			1985	36675		10	001	,,,	0 0	- 0 1		257							
			ST			1905	3664		27	001	809	1 0	414		239							
			OBS			1905	36635		27						239							
			ST			1839	3660	26	641	001	694	8 0	5Q2		228							
			085			1839	36595		41						228							
			ST			1820	3659		46		670		586		231							
			51 089			1801 1801	3658 36579		550	001	649	8 0	669		233							
			51			1765	3651		550 553	001	645	7 0	834		233 238							
			OBS			1765	36513		553	001	047	, ,	• •		238							
			51			1705	3639		58	001	630	0 0	997		236							
			0B5			1705	36385	26	58					15	236							
			ST			1541	3609		73	001	504	1 1	154		199							
			085			1541	36086		73	0.0.	a		2		199							
			51 085			1341 1341	3575 35750		91 91	001	348	/ 1	297		147							
			ST			1120	3542		709	001	175	7 1	423		147 084							
			OB 5			1120	35424		709	VV 1					084							
			ST			0875	3518		732	000	940	0 1	529		008							
			085			0875	35180		32						008							
			ST			0718	3511		50	000	753	9 1	614		964							
			0B5			0718	35114		50	000					964							
			5 T 085			0580 0580	3505 35053		164 164	000	608	/ 1	682		925							
			51			0517	35U5		72	000	532	1 1	739		925 916							
			OBS			0517	35054		72	000	116	. 1	, , , ,		916							
			51			0470	3502		775	000	505	5 1	791		913							
			085			0470	35018		75			_			913							
			ST			0445	3501		77	000	489	4 1	840		920							
			089			0445	35008		77						920							
			\$1 085			0426	3501		79	000	471	5 1	888		929							
			005	, 150	, 0	0426	35011	21	79					14	929							

35550	ENCE					~	MARSDEN	STATION	TIME		Т .	RIGIN	ATOR'S		DEPTH	MAX.		WAVE	WFA-	CLOUD			NODE	
CTRY	ID.	SHIP	LATITU	DE	LONGITUDE		SOUARE	(GM	1)	YEAR	CRUISE	S	TATION	\neg	TO BOTTON	DEPTH		ERVATIONS	THER	CODES	}	S	NODC TATION UMBER	
CODE	NO.		<u>.</u>	1/10	1/	10 S Z			HR.1/10		ND.		UMBER	-		3 14176 3	DIR	HGT PER SEA		TYPE AM				
3 1	8007	ΕV	3400	N (07316	W		10 25	1	1966		02			4480	15	11	3 4	X1	0 3	ļ		0035	
							WAT	ER	WIND	8AR	U+	_	MP. C	V15	NO. 085.	SPEC	IAL							
							COLOR	TRANS. DI	R. OR	1		DRY ULB	WET BULS	CODE	OBS. DEPTHS	OBSERVA	ITIONS							
							DT	SDO				83	267	+	26									
			1				T- 10,	3010	7,00			-	L	_		l		T - T						Τ,
		MESSENGR TIME	CAST NO.	CAR	D DEPT	H (m)	1,40	5 ./.	. 510	SMA-T	SPECIFIC	ALY-XI	ME D	∆ D YN, M x 10 ³	, SO	DCITY	02 ml/1		OTAL-?	NO2-N µg - a1/l	NO3-N pg - al/l	\$1 O4=\$1 ug = at/l	рН	ć
		HR 1/10	1		•			-	_					x 103	-	-		1	-	-		_		-#
																			I					
						00	2428	3628		455	003	398	18 C	000		346								
		174	4	0B:	-	100	2428 24J9	3628 3628		455 461	003	346	4 0	034		346								
				0B:		10	2409	3628		461	003	940	0	0 3 4		343								
						20	2377	3629		465	003	312	3 0	067		341								
		00	2	0B:		20	2397	3628		465						341								
				OB:	s 00	25	2393	3632	3 2	468						5342								
						130	2400	3642		473	0.03	234	0 3	100		345								
				0B:	-	30	2400	3641		473						345								
				08:		140	2417	3648		473	000	1 2 0	, ,	.1		352								
						50	2386	3652		485	002	3129	, ,	1163		346								
				0B:		150 175	2386 2050	3651 3667		485 592	000	118	ia n	1229		346 5267								
				08:		175	2050	3667		592	002	110	٠ د د	- 2		267								
				083		82	1998	3668		607						5254								
						.00	1955	3667		617	001	889	0 0	279		245								
				0B		ΟŪ	1955	3667		617					1 5	5245								
						.25	1912	3666	2	628	00	797	78 (329	5 1	5237								
				08:	s 01	.25	1912	3666	2 2	628						5237								
				5		50	1873	3662	_	635	00	739	94 (369		230								
				08		.50	1873	3662		635						5230								
						00	1832	3658		642	00	686	6 (1455		226								
				0B:		200	1832	3658		642	0.0			620		226								
						300	1814 1796	365a 365a		646 650		l663 l649)539)623		5229 5232								
				0B:		300	1796	3656		650	00.	044	744 (1022		5232								
						00	1759	3650		654	00	642	23 (786		5237								
				0B:		00	1759	3649		654	• • •					5237								
						00	1704	3639		659	001	626	9 (950		5235								
				0 B		00	1704	3638		659						5235								
						00	1546	3611		674	00	495	6	.106		5200								
				0B		00	1546	3611		674						5200								
						00	1350	3577		690	00	352	8 .	. 4 4		5150								
				08		00	1350	3577		690	00	170		271		5150								
						00	1140	3547		709	UŲ.	1178	50 .	.375		5091								
				0 B	-	00	1140 0911	3547 3521		709	0.0	976	. 6	486		5091 5044								
				0B.		100	0911	3521		729	000	/ 7 1 6		. • 0 4		5022								
						000	0711	3501		748	0.00	772	, ,	570		4961								
				0 B		000	0711	3507		748	500			(4961								
						00	0543	3498		763	000	610	3	639		+909								
				0В		00	0543	3498	0 2	763						4909								
				S		200	0489	3499		770	000	543	30	69		4904								
				OB	-	00	0489	3498		770				_		4904								
						300	0459	3500		774	000)505	3	749		4908								
				0B		300	0459	3499		774	000	1/100	20	700		4908								
						+00 +00	0444	3500 3500		776	000)493	99.	799		4919 4919								
				0 B	_	00	0444	3501		777	000	489	94	848		4933								
				0B		500	0436	3500		777	001	, - 0 >	, -	(4933								
				0.0	J 1.		0 4 5 0	2200	- 2						•	,								

REFERENCE					LE	MAR		STATION TI	ME		Т	ORIGINA	ATOR'S		DEPTH	MAX		WAVE	Tw	EA-	CLOUD			NODC	7
CTRY ID.	CODE	LATITU		LONGITUD		sau		(GMT)		YEAR	CRUI		TATION		TO	OF			1 6	HER	CODES		1 5	TATION	
CODE NO.			1/10		/10	10'	+	MO DAY HI			NO	+	UMBER			13 MPL	_	HGT PER	SEA		TYPE A M	Ť	- '	O INI O C N	-
318007	N EV 1	3338	3 N	07253	W	116			14	1966	,	0.2		,	4718	15	11	2 2	- 1 :	X 1	0 3			003	5l
							COLOR		SPEED	BAR		AIR TEA	WET	vis	NO.	SP	ECIAL								
							CODE	TRANS. DIR.	FORC			BULB	BULB	CODE	OBS.	DBSER	VATIONS								
							DT	50 03	50:	3 14	.6	240	220	8	27										
	MESSENGE	CAST	CAR			Τ		Ι .			SPECI	FIC VOLU	\$	Δ D.		UND		PO ₄ -P	1014		MO- N	NO. N	510. 6		Τ,
	MESSENGE TIME HR 1/10	NO.	TYP		TH (m)	T	.C	s */	SIG	MA-T	ANC	MALY-II), D	rN, M. K 10 ³	VEL	OCITY	02 ml/l	νg - 61/1	101A		NO2-N ug - a1/l	NO3~N μg - αt/I	\$1 04-\$1 yg - 01/1	pН	3
	HR 1/10	-						1			-			-	+				+	-+			_	-	+
		1	5	0 0	000	2	509	3647	24	444	0.0	3497	9 0	000	1 1	5367		ł	1	- 1	1	í	1	1	- 1
	21	4	08		000		509	36467		444						367									
			5		010		503	3647		446	00	3483	8 0	035	15	5367									
			065		U10		503	36468		446						5367									
	00.	2	S1 085		020 020		499	3648 36480		448 448	0.0	13467	6 0	070		5368									
	00,	_	0B3		325		499	36486		449						5369									
			S		030		499	3650		449	0.0	3461	5 0	104		5376									
			085		U3U		499	36495		449						370									
			S		050		500	3653		452	0.0	3445	5 0	173	1 :	374									
			06		050		500	36532		452						5374									
			08		064		504	36560		453						5377									
			08		075 075		279	36670		528 528	0.0	12730	4 (251		5326									
			08:		090		141	36684		568						5326 5293									
					100		070	3668		587	0.0	2173	6 0	312		5276									
			08		100		0.70	36684		587						5276									
			5		125		952	3664		bló	0.0	1914	5 0	363		5248									
			06		125		952	36638		616						5248									
					150		899	3665		630	0.0	1765	7 0	409		5237									
			08		150 200		899	36647 3663		630 644	0.0	1671	7 0	496		5237 5228									
			0 🛮		200		839	36627		644	00	11011	1 0	440		5228									
					250		822	3662		647	0.0	1653	3 0	579		5232									
			S	rD o	300	1	805	3661	2 (651	0.0	1637	0 Ū	6n1		5235									
			08:		300		805	36610		651						5235									
					400		771	3654		654	0.0	1639	1 0	825		5241									
			QB;		400 500		771 719	36542 3644		654 659	0.0	1623	1	988€		5241 5241									
			06:		500		719	36440		559 559	00	11023	1 0	700		5241									
			08		560		707	36432		551						5247									
					600	1	626	3660	2	500	0.0	1577	6 1	148		5225									
			06		600		620	36230		666					1:	5225									
					700		429	3590		584	0.0	1424	5 1	298		5177									
			0B:		700 800		.429	35900 3560		584	0.0	11220	2 1	4.20		5177									
			0 b;		800		211	3560 35603		7) 5 7) 5	00	1220	> 1	430		5117 5117									
					900		007	3534		722	0.0	1355	5 1	544		5059									
			08		900		007	35335		722		, , , , , ,				5059									
					000		79Ú	3515		745	00) (84 I	5 1	039		4996									
			08		000		79J	35149		7+3						4992									
					100		650	3509		758	0.0	00002	1 1	715		4953									
			08		200		1650 1573	35072 3510		758 769	0.0	0577	Q 1	778		4953									
			06.		200		1573	35100		767	00	10011	J 1	1/8		4940									
					300		519	3509		775	0.0	JU513	1 1	833		4954									
			06.		300		519	35093		775						4934									
					400		1489	3509		77H	00	0467	5 1	883		4939									
			08.		400		1489	35093		778						4939									
					500		1465	3509		781	0.0	0464	9 1	931		4946									
			0.0	> 1	500	G	1465	35093	2	781					14	4940									

EFERENC BY ID		SHIP	LATITU	DE LO	NGITUDE ANDCE	MARS DEN SOUARE	STATION T	IME YEAR	CRUISE	GINATO	ION	TO DE	AX. PTH)F	WAY AV9328O	TIONS	WEA	CLOUD		5	NODC TATION
DE NO	<u>'`</u>			1/10	1/10	10" 1"	MO DAY H	R.1/10	NO.	NUM	BER	BOTTOM S'M		HR. HGT	PER SE	CODE	TYPE AM		N	UMBER
3 1 8 0	07	Ēν	3314	N U	7213 W	116 32		018 196		026		5212	33 (060	2	X1	0 3			0037
						WA.		VIND BA	- V	TEMP.	VIS.	NO.	SPECIAL							
						CODE	TRANS. DIR.		TER DR		ET CODE	DEPTHS OBS	ERVATIO	N S						
						0.1	50 07		46 25	_	28 8	31		\dashv						
	Г		T .		1	10,	30,01	30, 1	70 23	0 2		7.							T	
	ľ	MESSENGR TIME	LCAST V NO.	CARD	DEPTH (m)	т "с	s */	SIGMA-T	SPECIFIC V	OLUME (-X107	₹ ∆ D DYN. M	VELOCITY	02		04=P	TOTAL-P	NO2-N	NO3-N	\$104-\$1	рН
	- 1	HR 1/10						-	-		x 10 ³	71100111			9771	μg = at/1	ug - o1/l	µg = a1/1	ug - at/1	
		0.1		STO	0000	2509	3647	2444	0034	979	0000									
		018	В	OBS STD	0000	2509 2486	36467 3648	2444 2452	0034	24.6	0035	1536								
				OBS	0010	2486	36479	2452	0034	200	0035	1536. 1536.								
				SID	0020	2484	3648	2453	0034	219	0069									
		Ου.	2	085	0020	2484	36483	2453				1536								
				OBS	0025	2484	36483	2453				1536	5							
				STD	0030	2484	3648	2453	0034	260	0103									
				OBS	0030	2484	36483	2453				1536								
				STD	0050	2464	3649	2453	0034	106	0172									
				OBS OBS	0050 0065	2484	36488	2453				1536								
				STD	0075	2486 2326	36497 3662	2454 2511	0028	443	0251	1537. 1533								
				OBS	0075	2326	36623	2511	0020		0 - 21	1533								
				STO	0100	2088	3670	2584	0022	073	0315									
				005	0100	2086	36700	2584				1528.	l							
				STD	0125	1981	3670	2613	0019	424	0366									
				085	0125	1981	36700	2613				1525								
				STD	0150 0150	1923	3009	2627	0018	164	0413									
				OBS STD	0200	1923 1859	36692 3664	2627 2639	0017	137	J>01	1524! 1523:								
				OBS	0200	1859	36638	2639	0017	122	0 > 0 1	1523								
				STD	0250	1832	3662	2645	0016	774	U586									
				STD	0300	1807	3659	2049	0016		0070									
				OBS	0300	1807	36589	2649				1523								
				SID	Ü40U	1760	3651	2054	0016	389	0834	1523	7							
				065	0400	1760	36506	2654				1523								
				STD	0500	1711	3642	2659	0016	187	0997									
				OBS	0500	1711	36420	2659	2015		110	1523								
				STD OBS	060 0	1622 1622	3625 36260	2668 2668	0015	600	1156	15220								
				STO	0700	1449	3589	2679	0014	752	1308	1518								
				QBS	0700	1449	35889	2679	001	1) [1200	1518.								
				STD	0800	1232	3563	2703	0012	435	1444									
				085	0800	1232	35628	2703				1512	5							
				STD	0900	1010	3535	2722	0010	536	1259									
				OBS	0900	1010	35345	2722		7 . 7		15060								
				STD OBS	1000 1000	0806 0806	3514 35143	2740	0008	/1/	1055	1499								
				STD	1100	0651	3509	2740 2758	0006	Hin	1733	14998								
				OBS	1100	0651	35092	2758	0000	0) 0	1,22	1495								
		0.2	1	OBS	1178	0573	35043	2764				1493								
				SID	1200	0563	3509	2769	0005	710	1795	1493								
				OBS	1200	0563	35089	2769				1493								
				STD	1300	0513	3509	2775	0005	126	1050									
				085	1300	0513	35069	2775	000	0.00	1 400	1493								
				STD OBS	1400 1400	0479 0479	3508 35084	2779 2779	0004	♥ ∪ 3	1899	1493: 1493:								
				STD	1500	0479	35084	2782	0004	551	1946									
				065	1500	0451	35080	2782	0004	J J L	1,40	14940								
		0.2	1	085	T1675	0420	35001	2779				1495								
		-		STD	1750	0416	3500	2779	0004	893	2064									
				STD	2000	0399	3499	2780	0004		2187									
		0.2	1	OBS	T 2174	0384	3488P	2773P												
				STD	2500	0347	3498	2785	0004	672	2428									
		0.2	1	OBS	T 26 74	0330	34969	2785				1508								
		0.2	1	STD	3000	0301	3496	2787	0004	464	2656									
		02:		OBS OBS	T3224 3324	0287 0282	34944	2787				15164								
				UU3	2264	U 2 0 2	34937	2787				1517	1							

REFERENCE					7 _1	MAR	oner I	57.0	ION TI	445			ORIGINA	2*4014		0.5000	MA	x.	WAY	, ,	1,	CLOUD	I			1
CTET ID.	COOE	LATITU	DE	LONGITUDE	DRIFT	SOU	ARE	JIA	IGMTI	me	YEAR	CRUISI	5	TATION	\dashv	DEPTH	OEPT		OBSERVA		WEA-	CODES			NODE	
CODE NO.	2001	<u>. </u>	1/10	* 1/1	0 2	10*	1.	MD	DAY H	R,1/10		NO.	N	UMBER	_	BOTTON	S'MPL	L'S DI	r. HGT	PER SEA	CODE	TYPE AM	1		NUMBER	
318007	EV	3254	+ N	07136	W	116		10		75	1966		0.2			5303	1	5 0	00 21	2	X 2	l of 3			0038	3
							WA	-	_	IND SPEED	BARC)· -	AIR TEA		VIS.	NO.		PECIAL								
							COLDR	TRANS	OIR.	OR FORCE	111111		DRY BULB	W ET	CODE	DEPTHS	OBSER	10TAV	45							
							DT	SD	13	505		5	256	233	7	27			_							
	MESSENGR	CAST	T	_				1 -		T-			c volu	5	Λρ	1	UND			D4-P				1	. [
	TIME	NO.	CAR		[m]	T	€	S	٠/	SIG	VA-T	ANON	AALY-X10	y Dy	△ D N. M. 10 ³		OCITY	O2 n		- 01/1	TOTAL-P	NO2-N ug - at/1	NO3-N µg - al/l	\$1 O4-		ć
	HR 1/10	-						+						+-					_	_					+	+
	I	1	ا 51	rD 00	0.0	l 2	459	36	33	24	49	0.0	3449	5 a	000	1 1 5	354	I	- 1		ı			1	l	11
	075	5	089				459		333		49			-	- • •		354									
			S.	00 D	10	2	459	36	32	24	48	00	3462	9 0	035	15	355									
			085				459		320		48						355									
			S.				447		32		52	00	3411	8 0	069		354									
	002	_	089 089				447		321 321		54						354									
			S1				441		33		54	0.0	3411	<i>u</i> 0	103		353									
			OB:				440		327		.55	50.	- 4 7 1	. 0	- 53		354									
			51				437		33		56	00	3405	9 0	171		357									
			089			2	437	36	334	24	56					1 5	357									
			083	-			429		334		58						356									
			51				146		67		66	00.	2371	7 0	244		292									
			083 51				012		670 67		66	0.0	2033		200		292									
			089				012		670		02	00.	2033.	4 0.	299		261									
			51				942		66		20	00.	1875	1 0	348		245									
			085		25	1	942		658		20			_			245									
			51				899		65		30	00	1784.	2 0	393	15	237									
			085				899		649		30						237									
			S1 085				838		62		43	00	1674	5 O	+80		228									
			S1				838 823		620 62		43	0.0	1655	7 0	5 4 2		228									
			51				806		60		50		1646		563 546		235									
			089				806		600		50						235									
			Si	D 04	ΟÚ	1	769	36	53		54	00	1641	5 0	810		240									
			085			1	769	36	532	26	54					15	240									
			S				717		43		59	00	1622	7 0	₹73	15	240									
			083				717		434		59						240									
			S1 083				579 579		16		70	00.	1535	4 1	131		211									
			51				319		160 74		70	00	1010ء	0 1	-73		211									
			0 B S				319		740		94	00.	1710	9 1	_ , ,		139									
			OBS				160		490		06						090									
			51				092		40		12	00	1141	7 1	396	15	073									
			089				092		399		1 4						073									
			S1 089				980		26		21	00	1062	0 1	000		046									
			083				980 935		260 259		21						048									
			51				860	35			28 37	0.00	909	6 1	05		043									
			089				860		213		37	000	,,0,,	0 1,	ر ن د		019									
			\$1				665	35			59	000	0672	4 1	584		1960									
			085				665		136		59			-	- 1		960									
			51				568		10	27	70	000	1567	9 1	746		938									
			085				568		103		70						938									
			089				520				74	000	1520	9 1	900		935									
			51				520 4 3 1		091 09		74 79	0.07	20.40	1 1	46~		935									
			089				481		U9 U88	27		UUL	1400	1 1	350		935									
			Si	_			460		U B		80	000)469	7 1	398		943									
			085	15	00	0	460		077		80		- /	-	_		943									

TABLE IV .-- Continued

	REFERENCE					MARSDEN	STATION TI	ME		1	ORIGIN/	2*8014	_	DERTH	MAX		WAVE	14/54	CLOUD				٦
	CTRY ID.			DE	LONGITUDE	SQUARE	IGMTI		YEAR	CRUISE	S1	TATION	\dashv	TO TO		003	ERVATIONS	0.001	CODES				
				_	1710	10.				+			-		t	-	1 1 1 1 1	CODE	TYPE AM	1		ANWREK	_
	31/8007	4 EV	3234	N	07121 W	1			1966					5303	1 !	06	2 2	X1	0 3			003	9
ST ST 14 SUS 119 Ze1 Ze4 7 Ze2							_			U			VIS.	NO.	SP	ECIAL							
ST ST 14 SUS 119 Ze1 Ze4 7 Ze2						COLOR	TRANS. DIR.	0.8				BULB	CODE	DEPTHS	OBSER	VATIONS							
STD 0000 24.79 36.38 24.47 0000 15.3559 15.355 1						DT	SD 14		11	19 2	261	244											
STD 0000 24.79 36.38 24.47 0000 15.3559 15.355 1		MESSENG					1	T -				., 5	ΛD	500		· · · · · ·	100 0						
STO 0000 24.79 36.38 24.47 0034.741 0000 13.359 13.360 0010 24.79 36.387 24.48 0034.681 0239 13.361 13.3		TIME	NO.	TYPE	DEPTH (m)	ī °C	s ·/	SIGA	T-AN	ANOM	ALY-X10	, DY	N. M In ³	. AFFC		O2 ml/l							ć
105		HK 1/10	+		-			+-				-+				-	+					+	+
105		I	1 1	ST	o 1 0000	2479	3638	24	47	001	3474	1 0	oan	1 15	359			ı	-		l	I	1 1
STD ORS OUT CAT 36373 2448 STD OUT CAT 36373 2448 OT 3640 2449 OT 3640 2449 OT 3640 2449 OT 3640 OT 36		10	5																				
STD ODP 2479 3640 2446 OD34673 OL69 15362 SDE OD25 2479 36405 2449 SDE OD25 2479 36405 2449 SDE OD25 2479 3641 2449 SDE OD25 CD25 SDE OD25 CD25 SDE OD25 CD25 SDE OD25 CD25 SDE OD25 CD25						2479	3639	24	48	003	3468	1 0	035	15	361								
085 0029 2479 36405 2448 15362																							
STO OUR CAPP SAC CAPP		20	2							003	3469	3 0	J 69										
STO 0030 2479 3641 2449 0034619 0104 15364 STO 00450 2476 3641 2459 0034619 0173 15367 OBS 00450 2476 36413 2450 0034614 0173 15367 OBS 00450 2476 36413 2450 15367 OBS 00450 2476 36413 2450 15368 STO 0065 2219 3663 2542 0025950 0249 15310 OBS 0075 2219 36631 2542 0025950 0249 15310 OBS 0100 2049 3669 2594 0021136 0368 15271 OBS 0100 2049 3669 2594 0021136 0368 15271 OBS 0100 2049 3669 2594 0021136 0368 15271 OBS 0125 1930 36670 2624 15242 OBS 0150 1848 36647 2633 0017587 0402 15224 OBS 0150 1848 36647 2633 0017587 0402 15224 OBS 0200 1848 3662 2642 15226 OBS 0300 1808 36607 2660 2660 0016629 0272 15235 OBS 0300 1808 36607 2660 0016629 0272 15235 OBS 0300 1770 3653 2654 0016420 0016420 0016420 0016420 OBS 0300 1770 3653 2654 0016420 001642		00	2																				
STD										003	3461	9 n	104										
STD												•											
OBS										003	461	4 0	173	15	367								
STD				_																			
STD 0100 2049 3669 2594 021136 0308 15271 0308 0100 2049 3669 2594 021136 0308 15271 0308 0125 1930 3667 2624 0018366 0357 15242 0358 0125 1930 3667 2624 021836 0357 15242 0358 0150 1886 3665 2633 0017587 0402 15234 0358 0359										00.	1505												
STD 0100 2049 3669 2594 2										002	(595)	0 0	249										
OBS				_						002	113	6 a	3 N B										
STD 0125 1930 36670 2624 018366 0357 15242 15242 15242 15242 15244 15444 1										002		0 0	,,,,										
STD										001	836	0	357										
OBS				OBS	0125	1930	36670	26	24					15	242								
STD 0200 1844 3663 2642 001645 0468 15230 15230 1828 3662 2644 0016629 0972 15233 15230 1828 3662 2646 0016629 0972 15233 15230 1828 3661 2650 0016464 0655 15236										001	758	7 0	+ ∪ 2										
OBS																							
STD 0250 182b 3662 264b 0016629 0772 15236 STD 0300 1808 3661 2650 0016464 0055 15236 STD 0400 1770 3653 2654 0016425 0619 15240 OBS 0400 1770 36534 2654 016252 0983 15241 OBS 0500 1720 36439 2659 15241 OBS 0500 1720 36439 2659 15241 STD 0600 1613 36224 2668 0012660 1142 15222 OBS 0600 1613 36224 2668 0012660 1142 15222 STD 0700 1405 35853 2685 0014076 1291 15169 STD 0800 1190 3555 2705 0012178 1422 15110 OBS 0800 1190 3555 2705 0012178 1422 1510 OBS 0900 0940 35283 2729										001	. о к 4 !	5 0	+88										
STD 0300 1808 3661 2650 0016464 055 15236 15236 STD 0400 1770 3653 2654 0016425 0019 15240 085 0400 1770 3653 2654 0016425 0019 15240 15240 STD 0500 1720 3644 2659 0016262 0983 15241 085 0500 1720 3643 2659 15241 15241 15242 085 0600 1613 36224 2668 0015660 1142 15222 085 0600 1613 36224 2668 15262 1522 1522 1520 0700 1405 3585 2685 014076 1291 15169										0.0.1	6629	a 1)	37/										
OBS 0300 1808 36607 2650 0019425 0019 15240 OBS 0400 1770 36534 2654 0016425 0019 15240 OBS 0500 1720 36444 2659 0016262 0983 15241 OBS 0500 1720 36439 2659 15241 15222 OBS 0600 1613 36224 2668 0015660 1142 15222 OBS 0600 1613 36224 2668 0014076 1291 15169 OBS 0700 1405 35853 2685 0014076 1291 15169 STD 0800 1190 3555 2705 0012178 1422 15110 OBS 0800 1190 3555 2705 012178 1422 15110 OBS 0900 0940 35283 2729 15034 15034 OBS 1000 0762 3514 2746 0008020 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																							
STD 0400 1770 3653 2654 0016425 0019 15240 OBS 0400 1770 36534 2654 15240 STD 0500 1720 3644 2659 0016262 0983 15241 OBS 0500 1720 36439 2659 STD 0600 1613 3622 2668 001566 1142 15222 OBS 0600 1613 3622 2668 001560 1142 15222 STD 0700 1405 3585 2685 0014076 1291 15169 OBS 0700 1405 35853 2685 15169 STD 0800 1190 3555 2705 0012178 1422 15110 OBS 0800 1190 3555 2705 0012178 1422 15110 STD 0900 0940 3528 2729 009754 1532 15034 OBS 0900 0940 3528 2729 009754 1532 15034 OBS 1000 0762 3514 2746 0008020 1621 14981 OBS 1100 0635 3509 2760 005621 1694 14947 OBS 1100 0635 3509 2760 005621 1694 14947 OBS 1200 0542 3509 2772 0005413 1754 14927 OBS 1200 0542 3508 2772 14997 OBS 1300 0511 3510 2776 005010 1806 14931 OBS 1300 0511 3510 2776 0004623 1655 14935 OBS 1400 0479 3508 2778 0004623 1903 14940										0 2													
STD				ST	0400	1770				001	642	0 0	519										
OBS																							
STD 0600 1613 3622 2668 0012660 1142 1522 STD 0700 1405 3585 2685 0014076 1291 15169 OBS 0700 1405 35853 2685 0014076 1291 15169 STD 0800 1190 3555 2705 0012178 1422 15110 OBS 0800 1190 35550 2705 0012178 1422 15110 STD 0900 0940 3528 2729 0009754 1>32 15034 OBS 0900 0940 3528 2729 15034 15034 STD 1000 0762 3514 2746 0008020 1621 14961 OBS 1000 0762 35142 2746 0008020 1621 14961 OBS 1100 0635 35089 2760 0005621 1694 14947 OBS 1200 0542 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>001</td><td>626</td><td>2 0'</td><td>983</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>										001	626	2 0'	983										
08S 0600 1613 36224 2668 15222 STD 0700 1405 3565 2685 0014076 1291 15169 08S 0700 1405 35853 2685 0012178 1221 15169 STD 0800 1190 3555 2705 0012178 1422 15110 08S 0800 1190 35550 2705 15110 STD 0900 0940 35283 2729 15034 08S 0900 0940 35283 2729 15034 STD 1000 0762 3514 2746 0008020 1621 14961 08S 1000 0762 35142 2746 14981 STD 1100 0635 3509 2760 000621 1694 14947 08S 1100 0635 35089 2760 14647 STD 1200 0542 35089 2772 0005413 1754 14927 08S 1200 0542 35089 2772 14927 STD 1300 0511 3510 2776 0005010 1806 14931 08S 1300 0511 35101 2776 14931 STD 1400 0479 3508 2778 0004632 1655 14935 08S 1430 0479 35080 2778 0004623 1903 14940										00.1		2 1	1 7. 3										
STD 0700 1405 3585 2685 0014076 1291 15169 0BS 0700 1405 35853 2685 15169 STD 0800 1190 3555 2705 0012178 1422 15110 0BS 0800 1190 35550 2705 15110 0BS 0900 0940 3528 2729 0009794 1232 15034 STD 1000 0762 3514 2746 0008020 1621 14961 0BS 1000 0762 35142 2746 14981 STD 1100 0635 35049 2760 000621 1694 14947 0BS 1100 0635 35089 2772 STD 1200 0542 35089 2772 0BS 1200 0542 35089 2772 STD 1300 0511 3510 2776 0005010 1806 14931 0BS 1300 0511 3510 2776 0005010 1806 14931 STD 1400 0479 3508 2778 0004632 1655 14935 STD 1400 0479 35080 2778 0004632 1903 14940										001	2000	J	142										
085 0700 1405 35853 2685 15169 5TD 0800 1190 3555 2705 0012178 1422 15110 085 0800 1190 35550 2705 5TD 0900 0940 3528 2729 0009754 1>32 15034 085 0900 0940 35283 2729 15034 5TD 1000 0762 3514 2746 0008020 1021 14961 085 1000 0762 35142 2746 5TD 1100 0635 3509 2760 14981 5TD 1100 0635 35089 2760 14947 085 1200 0542 35089 2772 0005413 1754 14927 085 1200 0542 35089 2772 0005413 1754 14927 5TD 1300 0511 3510 2776 0005010 1806 14931 085 1300 0511 35101 2776 14931 085 1400 0479 35080 2778 0004632 1655 14935 085 1400 0479 35080 2778 0004632 1655 14935 5TD 1500 0479 35080 2778 0004623 1903 14940										001	4076	5 1	291										
OBS 0800 1190 35550 2705 15110 STD 0900 0940 3528 2729 0009754 1>32 15034 STD 1000 0762 3514 2746 0008020 1e21 14961 OBS 1000 0762 35142 2746 14981 1e981 STD 1100 0635 3509 2760 000621 1e94 14947 OBS 1100 0635 35089 2760 000621 1e94 14947 STD 1200 0542 35089 2772 005413 1754 14927 OBS 1200 0542 35089 2772 14927 14927 STD 1300 0511 3510 2776 0005010 1806 14931 OBS 1300 0511 35101 2776 0005010 1806 14931 OBS 1400 0479 35080 2778 0004632												-	•										
STD 0900 0940 3528 2729 0009754 1>32 15034 OBS 0900 0940 35283 2729 15034 STD 1000 0762 3514 2746 0008020 1021 14961 OBS 1000 0762 35142 2746 14981 14947 STD 1100 0635 3509 2760 0006621 1694 14947 OBS 1100 0635 35089 2760 14947 14927 OBS 1200 0542 35089 2772 005413 1754 14927 STD 1300 0511 3510 2776 0005010 1806 14931 OBS 1300 0511 35101 2776 0005010 1806 14931 STD 1400 0479 35080 2778 004632 14935 STD 1500 0479 35080 2778 004623 1903				ST	0800	1190	3555			001	217	B 1	+22	15	110								
08S 0900 0940 35283 2729 15034 STD 1000 0762 3514 2746 0008020 1621 14961 08S 1000 0762 35142 2746 14981 STD 1100 635 3509 2760 0006621 1694 14947 08S 1100 0635 35089 2760 14947 STD 1200 0542 3509 2772 0005413 1754 14927 08S 1200 0542 35089 2772 0005413 1754 14927 STD 1300 0511 3510 2776 0005010 1806 14931 08S 1300 0511 3510 2776 000632 14931 STD 1400 0479 3508 2778 0004632 1455 14935 STD 1500 0479 35080 2778 STD 1500 0479 35080 2778 0004623 1903 14940																							
STD 1000 0762 3514 2746 0008020 1e21 14961 OBS 1000 0762 35142 2746 14981 STD 1100 0635 3504 2760 0006621 1e94 14947 OBS 1100 0635 35089 2760 14947 14947 STD 1200 0542 3509 2772 0005413 1754 14927 OBS 1200 0542 35089 2772 14927 14927 STD 1300 0511 3510 2776 0005010 1806 14931 OBS 1300 0511 35101 2776 14931 14931 STD 1400 0479 3508 2778 0004632 1855 14935 OBS 1430 0479 35080 2778 0004623 1903 14935 STD 1500 0452 3507 2781 0004623 1903 1										000	975	4 1:	32										
08S 1000 0762 35142 2746 14981 STD 1100 0635 3509 2760 0006621 1694 14947 08S 1100 0635 35089 2760 14947 STD 1200 0542 3509 2772 0005413 1754 14927 08S 1200 0542 35089 2772 14927 STD 1300 0511 3510 2776 0005010 1806 14931 08S 1300 0511 35101 2776 14931 STD 1400 0479 35080 2778 004623 14935 STD 1500 0462 3507 2781 0004623 1903 14940										000		0 1	- 2 1										
STD 1100 0635 3509 2760 000621 1e94 14947 OBS 1100 0635 35089 2760 14947 STD 1200 0542 3509 2772 005413 1754 14927 OBS 1200 0542 35089 2772 14927 STD 1300 0511 3510 2776 0005010 1806 14931 OBS 1300 0511 35101 2776 14931 STD 1400 0479 35080 2778 0004632 14935 OBS 1400 0479 35080 2778 004623 1903 14940										000	10021	J 1	221										
OBS 1100 0635 35089 2760 14947 STD 1200 0542 3509 2772 0005413 1754 14927 OBS 1200 0542 35089 2772 14927 STD 1300 0511 3510 2776 0005010 1806 14931 OBS 1300 0511 35101 2776 14931 STD 1400 0479 3508 2778 0004632 1855 14935 OBS 1400 0479 35080 2778 0004632 1855 14935 STD 1500 0452 3507 2781 0004623 1903 14940										0.00	1662	1 1	94										
STD 1200 0542 3509 2772 0005413 1754 14927 085 1200 0542 35089 2772 14927 STD 1300 0511 3510 2776 0005010 1806 14931 085 1300 0511 35101 2776 14931 STD 1400 0479 3508 2778 0004632 1655 14935 085 1400 0479 35080 2778 14935 STD 1500 0452 3507 2781 0004623 1903 14940										500	222		_ , -										
OBS 1200 0542 35089 2772 14927 STD 1300 0511 3510 2776 0005010 1806 14931 OBS 1300 0511 35101 2776 14931 STD 1400 0479 3508 2778 0004632 1855 14935 OBS 14400 0479 35080 2778 14935 STD 1500 0452 3507 2781 0004623 1903 14940										000	541	3 1	754										
08s 1300 0511 35101 2776 14931 STD 1400 0479 3508 2778 0004632 1855 14935 08s 1400 0479 35080 2778 14935 STD 1500 0452 3507 2781 0004623 1903 14940										_	-	-											
STD 1400 0479 3508 2778 0004832 1855 14935 OBS 1430 0479 35080 2778 14935 STD 1500 0452 3507 2781 0004623 1903 14940										000	501	0 1	806										
08S 1400 0479 35080 2778 14935 STD 1500 0452 3507 2781 0004623 1903 14940																							
STD 1500 0452 3507 2781 0004623 1903 14940							-			000	483.	2 1	555										
										000	14671	2 1:	י טר										
										000	-40Z.	- 1	, 0 3										

SHIP	LATITUDE		AGILNOE TOUR	MARSDEN SQUARE	STATION T	YI	EAR C		TOR'S ATION JMBER		DEPTH DEPTI	085	WAVE ERVATIONS	TH	ER	CODES		57	ODC ATION JMBER
-		/10			MO DAY					-	3 MTL	1		-	-+'				
EV	3215	NIOI	053 W	116 20			966	029		12	349 19	20	2 2)	(1	013	1		0040
				WAI	-	VIND	BARD-	AIR TEM		vis.	ND. SP	ECIAL							
				COLOR	TRANS. DIR.	SPEED OR FORGE	(mbs)		WET C	300	DEPTHS DBSER	VATIONS							
				DI	SD 23	506	132	+	-	7	25								
				1 01	30 23	1300	172	201	_ l	\rightarrow	47	r - I	T	T	_				
MESSENGR]	CAST	CARD	DEPTH (m)	1 °C	s */	SIGMA		PECIFIC VOLUM ANOMALY-X107	- DYN	. M.	SOUND	D2 m1/1	PO 4-P	TOTAL	L=P P	NO2-N	NO3-N	SI D4-SI	рН
HR 1/10	ND.	TYPE						ANOMALIERIV	x	103	VELOCITY		νg - 01/I	≥9 - 0	11/1	ıg = 01/1	µg - 01/1	µg - at/1	
											1		1	İ	1				
	1	STD	0000	2436	3633	245	6	0033857	7 00	00	15348	*							
146		OBS	0000	2436	36330	245	6				15348								
		STD	0010	2432	3632	245		0033855	5 00	34	15349								
		085	0010	2432	36320	245					15349								
		510	0020	2417	3629	245		0033698	3 00	68	15346								
002		OBS	0020	2417	36288	245					15346								
		085	0025	2417	36289	245		0033711		6.1	15347								
		STD	0030	2416	3629 36288	245 245		0033710	, 01	01	15348 15348								
		08S S T 0	0050	2416 2416	3629	245		0033797	7 01	69	15351								
		085	0050	2416	36287	245		0000171	. 51	J /	15351								
		085	3065	2414	36288						15353								
		510	0075	2249	3662	253		0026844	. 02	45	15318								
		085	0075	2249	36620						15318								
		STD	0100	2015	3669	260		0020287	7 03	04	15262								
		OBS	0100	2015	36687	260	3				15262								
		STD	0125	1916	3666	262	6	0018099	0.3	52	15238								
		085	0125	1916	36659	262	6				15238								
		STD	0150	1877	3663	263	5	0017419	9 03	96	15231								
		085	0150	1877	36633	263	5				15231								
		STD	0200	1839	3666	264	6	0016485	5 04	81	15229								
		OBS	0200	1839	36659						15229								
		STD	0250	1823	3663	264		0016484		63	15232								
		STD	0300	1808	3660	265		0016493	3 06	46	15236								
		085	0300	1808	36603			001(50)	- 0		15236								
		STO	0400	1783	3657	265		0016504	+ 08	11	15244								
		085 5 1 0	040U 0500	1783 1729	36566 3646	265 265		0016358	2 00	75	15244 15244								
		085	0500	1729	36455			0010336	3 0 /	,,	15244								
		STO	060ú	1606	3622	266		001553	7 11	34	15220								
		085	3600	1606	36219			001333	1 1 1	J 4	15220								
		STD	0700	1401	3588	268		001380	3 12	81	15168								
		085	0700	1401	35879			00100			15168								
		510	0800	1173	3552	270		0012060	14	10	15103								
		085	0800	1173	3552			001000	-		15103								
		STD	0900	0925	3526	273		000966	3 1 =	19	15048								
		085	0900	0925	35260						15028								
		STD	1000	0748	3512	274		0007960	16	0.7	14976								
		085	1000	0748	35120						14976								
		STD	1100	0638	3511	276		000653	3 1 =	80	14949								
		OBS	1100	0638	3510						14949								
		SID	1200	0548	3510	277		0005424	4 17	3.9	14929								
		085	1200	0548	35099			00010-			14929								
		STD	1300	0499	3509	277		000491	U 17	91	14926								
		OB5 STD	1300 1400	0499 0477	35097 3509	2 277 277		0004760	2 16	39	14926								
		085	1400	0477	3508			0004761	0 16	134	14934								
		STD	1500	0477	3508	278		0004578	R 1 **	86	14934								
		085	1500	0453	35080			0004711	0 10	.00	14941								

NCE	SHIP	LATITU	DE	LONGITUDE 20	MARSDEN SOUARE	STATI	ON TH		YEAR		IGINAT		DEPT		H OB	WAVE SERVATIONS		WEA+	CLOUD			NODC TATION
10. NO.	COOF		1/10	LONGITUDE			AY HE			CRUISE NO.	STA NU	MBER	80110	M S'MPL		HGT PER S	1 4	OOE	TYPE AM			UMBER
007	EV	3157		U7022 W	116 10				1966		030		540	0 1	5 23	2 4		x 1	0 3			
001	- v	21)		31022 W	WA			IND		Alt	RTEMP	*	-	<u> </u>	2 62		- 1	Λ.	1 013	1	1	0041
					COLOR	TRANS.	$\overline{}$	SPEED	BARC	J+		WET COL	NO.	OGCER	ECIAL VATIONS							
					COOE	(m)	DIR.	FORGE	(mbs			BULB	DEPTH	5 0036 K	V A HON 3							
					DT	SD	24	510	12	9 27	2	261 7	24									
	MESSENCE				Т ,				,			. I S A !	, ,									1
	MESSENGR TIME C	P NO.	CARO	DEPTH (m)	1.60	5	٠/	SIGM	A-T	SPECIFIC V	VOLUME Y-X107	₹ Δ t DYN. / X 10 ³	y. ^E	LOCITY	02 ml/1	PO4-P #9 • 01/1	TOTA		NO2-N ug - ai/l	NO3-N pg + pt/l	\$1 O4-5	ρН
	HR 1/10			_	-	+			_			X 10-					-	-			1	
			ST	D 0000	2476	36.	2.6	241		0034	820	000	,	5358				-			1	1
	178	a .	085		2476		356	24		0054	020	000		5358								
	1,0	,	ST		2474	36		24		0034	HARL	003		5359								
			085		2474		347	24		0024	.000	000		5359								
			ST		2480	36		24		0034	701	307		5363								
	002	2	085		2480		400	24		000				5363								
	- 0 2	_	085		2490		460	24						5366								
			ST		2489	36		24		0034	571	010		5367								
			065	0030	2489	36	460	24	50					5367								
			ST	D 0050	2478	36	43	24	51	0034	535	017	3 1	5367								
			085	0050	2478	36	432	24	51					5367								
			ST		2198	36	55	25		0025	247	024	8 1	5305								
			085		2198		550	25						5305								
			ST		2010	36		26		0020	160	030		5260								
			OBS		2010		587	261						5260								
			ST		1939	36		26.		0018	3553	035		5245								
			085		1939		575	26.		0017		0.7.5		5245								
			ST		1887	366		26		0017	543	039		5234								
			OBS		1887		550	26		0016	01/	04.0		5234								
			ST OBS		1841 1841	360	520	264		0016	0010	048		5229 5229								
			ST		1823	36		26		0016	620	056		5232								
			ST		1806	36		26		0016				5235								
			085		1806		597	26		0010	, 400	000		5235								
			ST		1775	36		26		0016	500	001		5242								
			085		1775		540	26		001	- 0 0			5242								
			ST		1721	36	43	26		0016	321	098		5241								
			OBS		1721	36	434	26						5241								
			ST		1605	36		266		0015	839	114		5219								
			085		1605	36	174	26	56				1	5219								
			ST	0 0700	1371	35	вο	261	88	0013	3739	148	8 1	5157								
			OBS	0730	1371	35	801	26	8.8				1	5157								
			ST		1118	35		2.7		0011	465	1 + 1		5083								
			085		1118		459	2.7						5083								
			ST		0907	35.		27		0005	1552	152		5021								
			085		0907		233	27						5021								
			ST		0739	35		275		0007	015	160		4974								
			085		0739		148	279		000:	. 210	1 - 7		4972								
			ST 085		0603 0603	350	780 78	270		0006	1419	167		4935								
			51		0537	35		27		0005	400	173		4935 4925								
			085		0537		080 080	27		0000	, ~ ∪7	113		4925								
			ST		0500	35		27		0004	100	178		4927								
			085		0500		395	27		0004	· 7 U I	1,0		4927								
			ST		0480	35		27		0004	.777	183		4935								
			085		0480		390	27		0004		103		4935								
			\$1		0441	35		27		0004	523	187		4935								
			085		0441		365	27		000		107		4935								
			203	1500	0441	ارو	000	211	J &				1	- ナララ								

EFERENCE					_ #	MARSDEN	STATION T	IME			ORIGIN.	ATOR'S	Т	DEPTH	MAX.		WAVE	W£A-	CLOUO	1		NOOC
TRY IO.	COOE	LATITU	DE	LONGITUOE	DRIFT	SQUARE	(GMT)		YEAR	CRUISE	S	TATION		TO	DEPTH		ERVATIONS	THER	CODES	_	S	NOITAT
-	-		1/10	1/1	0 =	10, 1,	MO DAY			NO.	_	UMBER	-+		S'MPL'S	DIR.	HGT PER SEA	COOE	TYPE AM	Ī		IUMBER
31 8007	EV	3156	N 1	06909 V	N]	115 19		018	1966		03			5121	15	20	1 2	X1	013			004
						-		SPEE	BARC	,- <u> </u>	LIR TEA		VIS.	NO. 085.	SPEC	JAL						
						COFO	R TRANS. OIR.	OR			DRY ULB	WET BULB	CDDE	OEPTHS	OBSERVA	TIONS						
						DT	SD 26	51	_	2 2	72	217	7	25								
						1	1	1						T							1	
	MESSENGE TIME O	CAST NO.	CARD	OEPTH	(m)	1 ℃	5 %.	\$1G	MA-T	SPECIFIC	ALY-XI	<u>ال</u> َّهُ الْحِيْنِ	∆ . M	. SOL		0 2 ml/l	PO4-P pg - q1/1	10TAL-P µg = 01/1	NO2-N pg - at/l	NO3-N µg - a1/1	\$1 O4-Si µg = a1/1	рН
	HR 1/10					ļ		+				'	103			_	70 0	, , , ,	Pg - Gi) .	pg = 01/1	py - 3///	-
				_ [0.0	35.0	2440			0.0.3				1						l		
	010	1	5T	000		2540 2540	3648 36480		436 436	003	579	4 0	000		374							
	018	5	51			2540			+36 436	003	583	5 0	036		374 376							
			085	00		2540			436	003	203	, ,	0 3 0		376							
			ST			2540			437	003	573	2 0	072		378							
	002		OBS	00.		2540	36500		437	003	,,,,	2 0	0 1 2		37d							
			OBS	00		2542	36520		+38						379							
			ST			2550	3658		440	003	549	3 0	107		383							
			OBS	00:	30	2550	36580		+40						383							
			ST			2553	3663		443	003	530	5 0	178		387							
			0B5	005	50	2553	36630	24	443					15	387							
			085	006		2360			512						345							
			ST			2210	3674		553	002	492	1 0	253		309							
			OBS	00.		2210			553						309							
			STI			2049	3666		91	002	135	3 0	11 د		270							
			OBS	010		2049	36660		591						270							
			ST			1981	3665		509	001	975	7 0	363		250							
			085	017		1981	36654		509	201	0.15	, ,			256							
			STI	019		1919	3666		526	001	825	6 U	410		243							
			08S			1919 1849	36660 3659		526 538	001	7 2 1	0 0	499		243 231							
			OBS	020		1849	36591		538	001	721	9 U	799									
			STI			1825	3658		544	001	689	<i>i</i> . 0	584		231 232							
			511			1802	3656		548		665		568		232							
			OBS	030		1802			548	001	00)	, ,	-00		233							
			ST	-		1759			553	001	651	0 0	834		236							
			085	040		1759			553						236							
			ST			1701	3638		559	001	624	9 0	998		234							
			OBS	050		1701	36379		559						234							
			ST			1581	3615		669	001	550	0 1	156		212							
			OBS	060		1581	36146	26	569					15	212							
			ST			1360	3578		589	001	363	3 1	302		153							
			OBS	070		1360	35784		589						153							
			ST			1139			710	001	162	1 1	428		091							
			085	080		1139			710			_			091							
			STI			0898	3522		731	000	950	9 1	534		017							
			OBS	090 0 100		0898	35218		731	000	750				017							
			ST! OBS	100		0722 0722	3512 35115		750	000	759	5 1	619		965							
			5 T 1			0612	3509		750 763	000	621	, 1	400		965							
			085	110		0612	35085		763	000	631	ر 1	689		938 938							
			ST			0550	3510		771	000	546	7 1	748		938							
			085	120		0550	35097		771	000	J → O	. 1	, → ∩		930 930							
			STI			0516	3509		775	000	514	6 1	801		933							
			OBS	130		0516	35092		775	000	- 1 4	- 1	- 0 1		933							
			ST			0484	3509		779	000	482	8 1	851		937							
			OBS	140	0.0	0484	35090		779			-	- •		937							
			ST	D 150	00	0454	3507	2 .	780	000	469	4 1	898		941							
			085	150	20	0454	35066	2 -	780						941							

4	SHIP	LATITUE)E	LON	GITUDE E	4DC18	MARSD	EN E	STATI	ON TH	WE 1	re a r	CRUISE	ORIGIN A	ATIO	ų	DEPTH TO BOTTON	DEPTI OF	085	WAVE ERVATIONS		WEA- THER CODE	CODES			NODO	N
	1000	· _	1/10		1/10	Z r	10*	1*	MO D	AY H	.1/10		NO.	N	UMBE	R	BOTTON	S.W. L	'S DIR.	HGT PER S	ΕA	CODE	TYPE A M	Т		MUMB	E K
7	Ē٧	3155	N	06	803 W		115	18	10 2	27 0	75 1	966	1	032	2		5212	1 1 9	24	2 3		1 X	0 3			004	43
						,		WAT	ER	w	IND	BARC	, L	AIR TEM	P. °C	VIS	NO.	۵۶	ECIAL								
								OLDR	TRANS,	DIR.	SPEED	METE	R	ORY	WET	CODE	OBS. DEPTHS	OBECE	VATIONS								
							-	300		- 2.6	FORCE	(mbs		ULB				-									
								DΤ	SD	25	510	12	5 4	261	23	9 7	24	<u> </u>			,			,			
ĺ	MESSENGR TIME	CAST	CAR		DEPTH (m)		т,	_		٠/	SIGM		SPECIFI	C VOLUA	۸E	₹ A D		UND	O 2 ml/1	PO4-P	101	IAL-P	NO2-N	NO3-N	51 04-	-51	н
	TIME -	NO.	TYP	E	DEPTH (m)	,	' '	C	,	7	SIGM	A-I	ANDN	ALT-XIO	7	χ 10 ³	VEL	OCITY	U2 m1/1	μg - a1/l	48	• m/l	μg - at/l	yg = 01/5	pg - a	1/I P	М
1	NK 1710			-	-		_													1	T						
ı		1	ς	TD	0000		2.5	80	364	46	242	2 1	0.0	3712	3	0000	1 15	383	l	1	1			1	,	'	
	0.7	5	ОВ		0000			80		+60	242							383									
				TD	0010			8ú	36		242		00	3716	1	0037	15	385									
			08	S	0010		25	80	36	460	242	2					19	385									
			S	TD	0020		25	80	36	46	242	2.2	0.0	1720	3	0074	1 5	386									
	00.	2	0B	S	0020			80	36	460	242	2.2						386									
			ОВ		0025			80		460	242							387									
				TD	0030			80	36		242		00	3724	4	0112		388									
			OB		0030			80		460	242		0.0	2 / 11 :	^	010		388									
				TD	0050			82	36		242		00	3684	B	0186		393									
			OB		0050			82		535	242			10/3	,	01		393									
				TD	0075			30	36		251		00	2841	4	0267		5339									
			OВ	_	0075			30 28		712	251		0.0	2297		0331		5292									
				T D	0100			28	36	12 720	257 257		00.	22911	0	0331		5292									
			QВ	5 TD	0125			11	36		260		00	2014	0	0385		5265									
			0B		0125			11		705	260		00.	2014	7	0 2 6 2		5265									
				5 TD	0150			30	36		262		20	1837	n	0434		5246									
			08		0150			30		582	262				_			5246									
				TD	0200			51	36		204		00	1697	8	0522		5232									
			08		0200			51		531	264							5232									
				TD	0250			28	36		264		00	1667	7	0606		5233									
				TD	0300			09	36		264			1653		0689		5236									
			OВ		0300			09		500	264						1 9	5236									
				TD	0400		17	80	36	55	265	5.2	0.0	1656	9	0855	1 5	5243									
			08		0400		17	80	36	547	269	52					1 !	5243									
			S	TD	0500		17	19	36	43	269	58	0.0	1633	9	1019	1 5	5240									
			OВ	S	0500		17	19	36	425	265	8					1 :	5240									
			S	ΤD	0600		16	03	36	20	266	8	0.0	1561	3	1179		5219									
			ОВ		0600			03		199	266			–				5219									
				TD	0700			99	35		268		00	1374	D	1326		5167									
			OB		0700			99		881	260		0.0	1 205	2	1455		5167									
				TD	0800			79	35		270		0.0	1205	2	1455		5106									
			OB		0800			79		538	270		00	0061	a	1564		5106 5031									
				TD	0900			34	35		272		001	0481	0	1204		5031 5031									
			ОВ		0900			34	35	260	272		200	0775	6	1652		4973									
				TD	1000			41		13 133	274		001	0110	U	1006		4973 4973									
			ОВ		1100			06	35		276		0.0	0610	0	1721		4936									
			0B	TD	1100			06		101	276		0.0	0010	7	4 1 2 1		4936 4936									
				10	1200			37	35	-	27		0.0	0536	5	1779		4925									
			0B		1200			37		086	27		00	0,00	-	A 1 1 7		4925									
				TD.	1300			95	35		27:		0.0	0494	2	1830		4924									
			QB		1300			95		080	27		0.0		-			4924									
				TD	1400			69	35		27		0.0	0470	9	1878		4930									
			ОB		1400			69		078	27							4930									
				TD	1500			48	35		278		00	0460	5	1925		4938									
			08		1500			48		067	278							4938									

ERENCE	SHIP			I	MAF	SDEN	STATE	ON TH				RIGINA	TOR'S		DEPT	H DEPTI		WAV	E		EA-	CLOUD			NDDC STATION
ID.	CODE	LATIT		LONGITUDE	7	JARE		SMTI	- 1	EAR	CRUISE	ST	ATION	4	TO BOTTO	0.5	1 00,	ERVA			HER DOE	CDDES	1		STATION NUMBÉR
-		116	1/10	1710	10		MD D			067	.40.			-		3 mrt	+	-	ER SE	_	-	TYPE AMI	-		
1 3007	ΕV	315) A) C	06656 W	11:	5 16			31 1	966	<u> </u>	03			493	8 15	24	2	2	×	(1)	0 3	I	1	0044
						COLOR	_	-	SPEED	BARC)- 	ORY DEM	WET	VIS.	ND, DBS.		ECIAL VATIONS								
						CODE	TRANS.	OIR.	OR FORCE	(mba		ULB	8018	2005	DEPTH	IS OBSEK									
						DT	SD	22	510	15	6 2	67	24	4 7	25										
	MESSENGE	C 4 5 7	5455				T			,	SPECIFIC	VOLUA	: ا ب	≨ Δ D 2 N. M.	Τ,	DUND	· ·	T pn	4-P	TOTAL		NDa-N	NO1:	\$104-5	
	MESSENGE		TYPE	DEPTH (m)		ı "C	S	•/	SIGMA	1-1	ANOM	ALY-X10	; [X 10 ³	· Vi	LOCITY	D2 m1/1		- 01/1	νg - 0		NO2-N pg - at/1	ND3-N Hg - at/l	₩g - al/	
	HP 1/10	+			+		+		-	-			+-	v				+			+			-	+
			ST	0000	1	2500	364	5 /s	244	5	003	493.	, I	0000	. 1	5364		I			-		-		1
	13	1	0BS	0000		2500		437	244		002		- 1			5364									
		•	ST			2499	364		244		003	495	9 (0035		5366									
			OBS	0010		2499	364		244							5366									
			ST			2499	364		244		003	497	2 .	0070		5367									
	00	2	OBS	0020		2499		439	244							5367									
			OBS	0025		2502		470	244		000		2	0105		5369									
			ST			2502	364		244		003	486	9 1	0105		5370									
			OBS	0030		2502		472	244							5370									
			OBS ST	0040 0 0050		2505 2455	36	488 50	244		003	341	7	0173		5373 5363									
			0BS	0050		2455		495	246		003	1741	,	0113		5363									
			51			2113	366		257		002	2761	4 1	0243		5284									
			OBS	0075		2113	366		257				-	,		5284									
			ST			1960	366		261		001	906	5	0296		5246									
			OBS	0100		1960	366	564	261							5246									
			ST			1905	366	5	262	9	001	788	5	0342		5235									
			085	0125		1905		551	262							5235									
			ST			1659	366		263		001	706	1	0386		5226									
			OBS	0150		1859		522	263		0.03	, , ,		04.40		5226									
			5 1 085	0200 0200		1820 1820	361	599	264 264		001	646.	۱ ۱	0469		5223 5223									
			ST			1812	36		264		0.0.1	650	o .	0552		5228									
			5 T			1797	36		265			645		0634		5232									
			OBS	0300		1797		572	265		001			0054		5232									
			ST			1744	36	48	265		001	618	4	J 797		5232									
			OBS	0400		1744	36	482	265	6					1	5232									
			ST			1700	36		266	1	001	607	4	0959	1	5234									
			085			1700		400	266							5234									
			ST			1540	36		267		003	496	8	1114		5198									
			OBS	0600		1540		093	267			27.	,	1		5198									
			ST			1365	35		269		001	346	Ľ.	1456		5155									
			OBS ST	0700		1365 1151	359	822 51	269 271		001	168	0	1382		5155 5096									
			OBS	0800		1151		514	271		001	108	7	1202		5096									
			51			0923	35.		272		0.07	982	6	1489		5027									
			OBS			0923		233	272		000	, 702	9	* - 0 3		5027									
			ST			0741	35		274		000	789	5	1578		4973									
			085			0741		114	274		- 5 -					4973									
			ST			0621	35		276		000	0633	4	1649		4942									
			OBS			0621		100	27€	. 3						4942									
			ST			0556	35		277		000	3555	8	1709		4933									
			OBS			0558		100	277							4933									
			ST			0521	35		277		000	1509	2	1762		4935									
			08S ST			0521 0497	35	109	277		00.	1/4 24 /-	1	1811		4935									
			0BS	1400		0497		113	277		000)484	T	1811		4942									
			ST			0479	35		278		000)467	n	1859		4952									
											000) + U / I		1000											
			OBS			0479		117	278		300	,	_	> >		4952									

REFERENC	- SHIP	LA	TITUDE	LOF	IGITUDE POP	MARS	OEN ARE		ION TI		YEAR	ORIGIN CRUISE S	ATOR'S		DEPTH TO	DEPTE		WAVE SERVATIONS	W EA-			ST	IODC ATION
ODE NO	CODE	.	1/1	0	1/10 6 2	10"	1 1-	MO E	AY H	R,1/10			UMBE		BOTTOM	S'MPL	'S DIR.	HGT PER SE	CODE	TYPE AM	T	N	J M B E R
3180	D7 EV	3 .	154 N	0.6	543 W	115	15	10	27	187	1966	03	4		4755	10	24	2 4	ΧI	T of 3			0045
2 100	J .	1 -		. 00	, , , , , , , , , , , , , , , , , , ,	1	WA			IND	T	A IO TE		7	NO.	_]	1 / 1	1 013	,		054.
							COLOR	TRANS,	DIR.	SPEED	BARC	J-	WET	VIS.	085.		ECIAL VATIONS						
							1000	lmi	DIR.	FORCE	(mbs	1 BULB	BULB		DEPTHS								
							DT	SD	21	512	14	6 250	23	9 7	21								
	MESSEN	GR C		ARD		T					1	SPECIFIC VOLU		₹ ∆ D	(0)	UNO		PO4-P	TOTAL-P	NO2-N	NO3-N	51 04-51	
	TIME	of N		TYPE	DEPTH (m)	1	*C	5	٠/	SIGM	A-T	ANOMALY-I	7° 1	X 10 ³		OCITY	O2 ml/	μg = σ1/1	νg = α1/1		μg - a1/1	yg - at/l	ρH
	HR 1/	10				+	_	+		+			-		+			-		+	-	-	-
	1	ļ		STD	0000	١,	519	36	26	24.	3.6	003673	,	0000	1 16	367						ļ	
	1	87	-)BS	0000		519		264	24.		003073	2	0000		367							
	1	0 /	C	STD	0010		515	36		24		003674	3	0U37		367							
			C)BS	0010		515		252	24.		003014		0051		367							
				STO	0020		504	36		24		003637	6	0073		367							
	0	01	C	BS	0020		504		264	24		505051	_			367							
		-		BS	0025		503		265	24						367							
				STD	0030	2	502	36	27	24	31	003634	5	0110	1.5	368							
			C	BS	0030	2	502	36	266	24	31				15	368							
				SID	0050	2	502	36	31	24	35	003609	6	0187	1.5	372							
			C	BS	0050		502		312	24						372							
				STD	0075	2	443	36	61	24	75	003234	7	0268	15	365							
			C	185	0075		443		610	24						365							
				STD	0100		070	36		25		002191	6	0335		276							
)BS	0100		070		657	25.						276							
				STD	0125		912	36		26		001850	6	0386		236							
				BS	0125		912		589	26						236							
			C	BS STD	0139 0150		.847 .841	36	577	26 26		001695	1	0430		220							
			_	BS BS	0150		841		20 577	26		001093	1	0430		220							
			C	STD	0200		829	36		26		001657	/.	0515		225							
			(BS	0200		829		572	26		001001	4	0 - 1 -		5225							
			_	STD	0250		797	36		26		001658	4	0299		3223							
				STD	0300		773	36		26		001633		0081		5223							
			C	BS	0300		770		499	26						5223							
				STO	0400		730		43	26		001621	5	0844		5227							
			C)BS	0400	1	730	36	432	26	56				15	5227							
				STD	0500		679	36		26		001615	6	1005		5227							
				BS	0500	1	679	36	321	26	60					227							
				STD	0600	1	520	36	04	26		001488	1	1161	1.5	5191							
				DBS	0600	1	520	36	044	26	75				19	5191							
				STD	0700		280	35	65	26	95	001301	0	1300	15	125							
			C	BS	0700		128Ū		645	26						5125							
				STD	0800		100		44	2.7		001237	0	1427		098							
			()bs	0800		160		444	27						098							
				STD	0900		1004	35		27		001068	3	1542		057							
			(OBS	0900		1004		310			000011	^			057							
				STD	1000		1842		17	27		000911	0	1641		5012							
)BS	1000		844		170	27						012							
			()BS	1050	(720	35	070	27	4/				1 4	+972							

REFERE	NCE	SHIP					MARSDE		STATI				ORIG	HNATO	or's	T	DEPTH	MAX.		WAVE	WEA-			NDDC
TRY DDE	ID. NO.	CODE	LATITU	1/10	LONGITUDE	DRIFT	SOU ARE		0 O	AY H		YEAR	CRUISE NO.	STAT			TO BDTTOM	OF S'MPL'	000	HGT PEP SI	THER CODE	TYPE AM		UMBER
3 1 8	3007	Ev	3154	· N	06543	W	115 1	15	10 2	27	198 1	1966	U	34			4755	31	24	2 4	×⊥	7 7		0046
								WATE	R	W	IND	BARC	AIR	TEMP.			NO.		CIAL					
								LOR	TRANS.	DIR.	SPEED DR FOFCE	M ETE	R ORY			VIS	OBS. DEPTHS		ATIONS					
										21	512	14	6 250) (239	7	06							
		MESSENGR TIME HR 1/10	CAST NO.	CAR		(m)	т ° С		s	٠/	SIGM	A = T	SPECIFIC VO		≥ ∠ DYN	. M.		OCITY	O 2 ml/I	PO4-P #2 * 01/1	TOTAL=P		NO3-N µg - at/5	
												j		_										
				5		00	252	20	30.	4.7	242	26	00367	733	00	60	15	367						
		19	8	083		00	252	2.0	36	268	242	26					15	367						
				5	00 D1	10	251	12	364	2.8	242	29	00364	+83	00	37	15	367						
		19	8	OB:	5 00	10	251	12	36	276	248	29					15	367						
		19	8	0B	5 T15	34	043	37	35	102	27	7.7					14	939						
				51	ID 17	50	041	11	349	9	27	79	00048	97			14	964						
				51	D 20	00	038	3 3	34	₹8	278	81	00047	797			14	995						
		19	8	OB:	5 T20	57	037	7.7	34	979	278	B 1					15	OÜZ						
				5	rD 25	00	03:	38	34	₹7	2.78	8.5	00040	512			15	ŰΘΙ						
		19	8	OB:	5 25	79	033	31	344	965	278	85					15	071						
				5	TD 30	00	028	39	349	94	278	3.7	00044	+24			15	126						
		19	R	089	131	00	027	79	340	935	2.78	8.7						139						

REFERENCE	SHIP				_=	MARSE	DEN	STATION T	ME			ORIGIN	ATOR'S		DEPTI	H MA		WA	VE.	W EA-	CLOUE	T		NDDC	7
CODE NO.	CODE	LATITE		LONGITUDE		SQUA		(GMT)		YEAR	CRUISE		TATION		10 80110	6	F	OBSERV.		THER	CODE			NODC STATION NUMBER	
-		2220	1/10	1/	101	10*	1.	MO DAY H			NO.		UMBER			3 m/		-	PER SE		11171 22			HOWISTA	-
31 8007	EV	3225	DON	064308	W	115	24		031	1966	لببا	03		, 1	188	4 1	4 1	7 2	-	\ \ \ \ 1	0 3			004	7
						-	OLOR		/IND	BARC		AIR TEA	MP. °C	VIS.	NO.	5	PECIAL								
							CODE	TRANS. DIR.	O9 FORCE	WELE		ULB	M E T	CODE	DEPTH	IS DBSE	RVATION	12							
							DT	SD 20	515		2 4	50	233	à	21	+									
	MESSENGR					T		T	Т				1 -	Δο	4-7			-				1			η,
	1174-6	ND.	CAR	DEPTH	(m)	T	"C	\$	SIG	MA-T	SPECIFIC	ALY-XI	07 0	rn. M k 10 ³		LOCITY	02 m		O4-P	10 TA L-P	ND 2-N ug - of/1	NO3-N ug - at/l	\$1 O4~		ć
	HR 1/10			-				-	-					K 10°			+		-			20.000		+	+
				10 00	ΔO	1 20	67	3634	1 2/1	.47	004	466	, n	000	, I ,	5356									ŀ
	031	1	08				67	36341		47	000		0 0	000		5356									
				TD 00			65	3634		48	003	464	4 0	035		5357									
			OB:	5 00	10	24	65	36342	24	48						5357									
				rD 00		24	64	3637		50	003	448	3 0	069	1	5358									
	002	2	OB.				64	36366		50						5358									
			OB:				64	36367		50						5359									
			0B:				60	3637 36366		51 51	003	440	8 0	104		5359									
			5				05	3639		70	กก∢	274	3 0	171		5359 5349									
			089				05	36390		70	00)	214	, ,	111		5349									
			51				60	3653		23	002	780	J 0	246		5320									
			083			22	60	36529	25	23						5320									
			S:				159	3659		10	001	959	7 0	30t	. 1	5245									
			OBS				159	36587	26							5245									
			OBS				73	36589	26		201	200	7 0	15.5		5224									
			S1 083				171 171	3659 36587	26 26		001	751	7 0	352		5225									
			51				40	3657		39	001	694	0 1	395		5225 5220									
			085				40	36574	26		901	0 7 4	7 0	273		5220									
			S1	D 02	00	18	12	3656	26		001	057	4 0	479		5220									
			OBS			18	12	36557	26	45						5220									
			Si			17	91	3653	20	48	001	644	1 0	562	1	5242									
			51				69	3650	26		001	631	4 0	643		5223									
			OBS				69	36499	26		201					5223									
			S1				26	3641 36407	26 26		100	630	2 0	807		5226									
			OBS				88	36357	26							5226 5224									
			51				20	3622	26		001	551	2 0	966		5208									
			089	0.5	ل لَ	16	20	36223	26							5208									
			S 1				93	3601	26	73	001	457	5 l	116		5182									
			OBS				93	36005	26							5182									
			S1				20	3588	26		001	423	4 1	260		5174									
			0B9				20 04	35875 3569	26		001	2.2		Loc		5174									
			089				J4	35689	26 26		001	343	8 1	398		5150									
			OBS				98	35546	27							5150 5125									
			51				97	3540	27		001	175	5 1	524		2092									
			OBS	0.90	00	10	97	35397	27				_			5092									
			0B9			1 C	31	35342	27	18						5076									
			51				00	3514	27		000	867	1 1	626	1 4	4996									
			OBS				0.0	35136	27							4996									
			51			06		3505	27		000	668	6 1	703		4941									
			089 ST			06	19 63	35048 3508	27		0.0			¬ .		4941									
			089				63	35076	27 27		000	28U.	> 1	766		4935									
			51			05		3506	27		000	550	в 1.	822		4935 4935									
			OBS			0.5		35056	27		000	0		- 2 4		4935									
			S 1	0 14	00	04		3503	27		000	511	5 1	875		4950									
			089	140	0.0	04	7.1	35020	27	75					1 4	4930									

ERENC!	SHIP	LATITU		ONGITUOE	MAR SOL	ARE		ION T		YEAR	CRUI		TATE	ON		DEPTH TO DTTOM	DEPTI OF	OB		TIONS	WEA- THER CODE	COOES		9	NODC TATION TUMBER
E NO	`		1/10	1/10	10*	1.	MO I	DAY H	1R.1/10		NC).	IMU	BER	100	JIIOM	S'MPL	S DIR	HGY	PER SE	CODE	TYPE AM	1	- '	*UNIBER
1 80	07 EV	3315	N C	06335 W	115			31	047	1966		0.3			4	481	16	0.3	5	3	X 2	1 5 9			0048
						WAT	_	_	SPEED	8ARO		AIR TE	_	_		NO. 085.	SP	CIAL							
						COLOR	TRANS, Im)	DIR.	FORCE	(mba)		DRY BULB	8U	LB C	D	OBS. EPTHS	OBSER	ZAONS							
								0.2	515	18	6	211	1	67	7	11									
	MESSENGE TIME HR 1/10	OF NO. [CARD TYPE	DEPTH (m	ı	* C	s	٠4.	SIGA	T-AM		FIC VOLU		₹	10 ³	ZOT.		02 ml/		D ₄ =P - o1/I	101AL-P pg - al/l	NO2-N µg - al/l	NO3-N yg - ol/l		
	1		STD	0010	, 2	442	'									'							'		
	0.4	7	085	0010		442	35	UIP	23	54P															
			STO			439																			
	04	7	085	0025		438	35	JZP	23	56P															
			510 510			438																			
	04	7	085	0050		438	3.5	07P	23	60P															
	94	,	STE			246	,,,	0 ,	2.3	00,															
			STO			0.85																			
			STE	0125]	961																			
			STO	0150]	877																			
	04	7	OBS	0151		874	36	53P	26	27P															
			STE			826																			
	04	7	OBS	T0202		824	36	56P	- 26	42P															
				0.550		0.00																			
			STO			808																			
	0.6	,	510	0300	1	790	7.6	500																	
	04	7	STC OBS	0300	1	790 788	36	59P		54P															
			S10 OBS S10	0300 0304 0400]]	790 788 754			26	54P															
	04		ST0 OBS ST0 OBS	0300 0304 0400 T0431	1	790 788 754 732		59P 62P	26																
			S10 OBS S10	0300 0304 0 0400 T0431 0 0500]]]]	790 788 754			26	54P															
			STC OBS STC OBS STC	0300 0304 0400 T0431 0500	1	790 788 754 732 623			26	54P															
		7	ST0 OBS ST0 OBS ST0	0300 0304 0400 T0431 0500	1	790 788 754 732 623 460	36		26 26	54P															
	04	7	ST0 OBS ST0 OBS ST0 ST0	0 0300 0304 0 0400 10431 0 0500 0 0600 0 0700 10710	1 1 1 1 1 1 1	790 788 754 732 623 460 294 277	36	62P	26 26	54P 70P															
	04	7	ST0 OBS ST0 OBS ST0 ST0 OBS ST0	0 0300 0304 0 0400 10431 0 0500 0 0600 0 0700 10710 0 0800 0 0900	11 11 11 11 11 11 11 11 11 11 11 11 11	790 788 754 732 623 460 294 277 047	36	62P	26 26	54P 70P															
	04	7	ST0 OBS ST0 ST0 ST0 OBS ST0 ST0	0 0300 0304 0 0400 T0431 0 0600 0 0700 T071U 0 0800 0 0900	1 1 1 1 1 1 1 1 0 0	790 788 754 732 623 460 294 277 047 1836 672	36	62P	26 26	54P 70P															
	04	7	\$10 OBS \$10 OBS \$10 \$10 OBS \$10 S10 \$10	0 0300 0304 0 0400 0 0500 0 0600 0 0700 70710 0 0800 0 0900 0 1000	1 1 1 1 1 1 1 0 0	790 788 754 732 623 460 294 277 047 1836 672	36 36	62P 43P	26 26 27	54P 70P 56P															
	04	7	ST0 OBS ST0 ST0 ST0 ST0 ST0 ST0 ST0	0 0300 0304 0 0400 0 0500 0 0600 0 0700 0 0300 0 0900 0 1000 0 1100	11 11 11 11 11 11 11 11 11 11 11 11 11	790 788 754 732 623 460 294 277 047 1836 672 1555	36 36	62P	26 26 27	54P 70P															
	04	7	ST0 OBS ST0 ST0 OBS ST0 ST0 ST0 ST0 ST0 ST0 ST0 ST0 ST0 ST	0 0300 0304 0400 0 10431 0 0500 0 0700 0 0700 0 0700 0 0900 0 1000 0 1100 0 1100		790 788 754 732 623 460 294 277 047 1836 672 1555 1529	36 36	62P 43P	26 26 27	54P 70P 56P															
	04	7	ST0 OBS ST0 ST0 ST0 ST0 ST0 ST0 ST0 ST0 ST0 ST	0 0300 0304 0400 0 0400 0 0600 0 0700 0 0700 0 0800 0 0900 0 1100 0 1100 1 1130	1 1 1 1 1 1 1 1 1 0 0 0 0 0	.790 .788 .754 .732 .623 .460 .294 .277 .047 .047 .0836 .672 .0555 .0529 .0504	36 36	62P 43P 43P	26 26 27	54P 70P 56P															
	04	7	ST0 OBS ST0 ST0 ST0 ST0 ST0 ST0 ST0 ST0 ST0 ST	0 0300 0304 0 0400 0 0500 0 0600 0 0700 70710 0 0800 0 0900 1100 11130 1200 1300 11329	1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0	790 788 754 732 623 460 294 277 047 1836 672 1555 1504 1472	36 36	62P 43P	26 26 27	54P 70P 56P															
	04	7	ST0 OBS ST0 ST0 ST0 ST0 ST0 ST0 ST0 ST0 ST0 ST	0 0300 0 0400 10431 0 0600 0 0700 10710 0 0900 11000 11130 11309 1300 1300 11329 1400		.790 .788 .754 .732 .623 .460 .294 .277 .047 .047 .0836 .672 .0555 .0529 .0504	36 36	62P 43P 43P	26 26 27	54P 70P 56P															

REFERENCE	SHIP	LATITU		LONG		MA C	RSDEN U ARE	STATION	IME	YEAR	L	ORIGINA			DEPTH	DEPT			VAVE RVATIONS	WEA				N ST	DDC	
CODE NO.	CODE		1/10	LONG	1/10	10. 20		MO DAY		IFAR			LATION UMBER		BOTTOM				GT PER SE	1 000				NU	MBER	
31800	7 EV	3356		062	34 W	11		10 31	122	196é	1	03	7		4207	1		_	5 3	X 1				(1049	
, ,	, ,		,			'	WA	TER	WIND	BAR	0-	AIR TEA	P. °C	VIS	NO.	ľ	ECIAL	7	- ' '							
							COLOR	TRANS. DIR	SPEED	MET	٤R	DRY BULB	W ET BULB	CODE	OBS.	OBSER	VATIO	NS								
							DT	SD 20	SI	_		194	144	7	24	-		-								
		_						30/20	131	0 20	1	1 74	_		1		1	_			,	-				\neg
	MESSENGR TIME	CAST	CAR	D E	DEPTH (m	+	ĭ *C	s */	stG	MA-T	SP	ECIFIC VOLUM	<u> څ</u> ک	YN. M	. SO!	UND	02	m1/1	PO4-P µg - at/t	101A L-1			103-N 19-01/I	\$1 O4-\$1 I/ID - QU	рН	S C
	HR 1/10							-	+		-		-	x 103			-		-		+	+	• • •	-		\mathbb{H}
	!		c	TD	0000		2378	3619	1 2.	463	١,	003321	2 /	0000	, , , ,	332						-	l			11
	12	2	06		0000		2378	36191		463	(003321	2 (,,,,,		332										
		-		TD	0010		2378	3619		463	(003325	2 0	033		334										
			ОВ		0010		2378	3619	. 24	463						334										
				TD	0020		2379	3619		463	(003330	6 0	067		336										
	00	2	0B		0020		2379	3619.		463						336										
			08		0025		2379	3619. 3619		463		00.4446	. ,	100		337										
			08	G T	0030		2379 2379	3619		463 463	(00 5534	0 (100		338										
				TD.	0050		2379	3640		463	-	003341	1 (167		341										
			08		0050		2379	36199		463		00.5.1		, ,		341										
				T D	0075		2380	3623		465	(003326	5 (250		346										
			06	5	0075		2380	3623	2	465					15	346										
				TD	0100		2254	3665		533	- (002688	4 () 3 2 5		323										
			08		0100		2254	3664		533						323										
				TD	0125		2080	3670		586	(002194	5 (386		283										
			08	5 TD	0125		2080 1992	3670 3669		586 609	- (884100	a i	1438		283 264										
			08		0150		1992	3666		604	`	001,00	7	, , , , ,		264										
				TD	0200		1889	3662		630	-{	001798	5 0) > 3 3		244										
			08	5	0200		1889	36620	2 (530						242										
				TD	0250		1844	3660	20	640	(001720		0621		238										
				TD	0300		1811	3657		647	(001678	9 (706		236										
			OB		0300		1811	36572		547						236										
			0B	T D	0400		1780 1780	3653 36521		651 651	- (001671	4 (874		243										
				10	0500		1721	3643		558	(001637	2 1	039		241										
			06		0500		1721	3642		558	`	00103.		. • • •		241										
			5	T D	0600		1617	3619		664	(001596	7 1	201		223										
			0В		0600		1617	36194	26	564					15	223										
				1 D	0700		1368	3577		586	(001393	0 1	350		156										
			ОВ		0700		1368	35766		586						156										
			08	TD	0800		1144 1144	3546		707	(001194	9 1	.48C		092										
				1 D	0900		0909	354e(3521		707 729		000976	0 1	588		092										
			08		0900		0909	3520		729	,	000776	9 1			021										
				TD	1000		0679	3503		749	(000753	9]	675		948										
			ОВ		1000		0679	3503		749						948										
				T D	1100		0578	35U7		765	-{	000597	1 1	742	14	924										
			ОВ		1100		0578	35069		765						924										
				TD	1200		0523	3506		771	(000538	2 1	799		919										
			OB	5 T D	1200		0523 0487	3505° 3505		771 775		000537	, ,	063		919										
			0B		1300		0487	3505		775	(000503	' '	851		921										
				T D	1400		0458	3504		777	(000487	3 1	901		925										
			ОВ		1400		0458	35039		777	,		•			925										
				TD	1500		0436	3502		779	(000475	5 1	949		933										
			ОВ	S	1500		0436	3502	2	779					14	933										

Beerra	1 1			,											1			,			
CTRY ID.	SHIP	LATITU	OF L	ONGITUDE SO	MARSOEN SOUARE	STATION TH		YEAR	CRILISE	IGINAT	OR*S	_	OEPTH	MAX. DEPTH		WAVE ERVATIONS	WEA-	CLOUG			NODC
CODE NO.	COOE		1/10	1/10	10. 1.	MO DAY HE	1/10		NO.		MBER		воттом	OF S'MPL'		HGT PER SEA	CODE	TYPE AM	1	1	UMBER
31800	EV	3440	0 NO	61255W	115 41	10 31 1	93	1966		038			4207	15	34.	4 -	X1	0 3			0050
					WA	TER W	IND	BARO	• –	TEMP	. °C	vis.	NO.	C D E	CIAL	, ,	,			'	0000
					COLOR	TRANS. DIR.	SPEED OR FORCE	METER (mbs)		Y	WET BULB	CODE	OBS. DEPTHS	OBSERV	ATIONS						
					DT	50 03	508	23			161	7	27								
						1 1 1 1 1	1	1			_										
	MESSENGR TIME	LCAST NO.	CARO TYPE	OEPTH (m)	1 °C	5 %.	SIGM	A - T	SPECIFIC V	/OLUME ,7=X10 ⁷	ÖY	∆ 0 4. M 10 ³	. AEFO		O2 m1/1		OTAL-P pg · ol/l	NO2-N pg - qi/l	NO3=N yg = at/l	St O4-St	ρН
	HR 1/10				-		-				, x	10"	-	-		+	-	-	pg - 01.1		
		Į.	STD	0000	2333	3615	241	73	0032	285	l Ut	000	1 15	321			I	1	1		
	193	3	OBS	0000	2333	36145	24		0002	200		, 0 0		321							
			510		2333	3615	24	73	0032	324	0.0	32		323							
			OBS	0010	2333	36145	24							323							
	00;	2	STO		2333	3615	24		0032	328	0.0	65		324							
	00,	2	085 085	0020 0025	2333 2334	36150 36150	24	-						324							
			510		2334	36150	24		0032	395	0.0	97		325 326							
			OBS	0030	2334	36150	241			- / J		. , ,		326							
			STD		2335	3616	24		0032	466	0 1	62		330							
			OBS	0050	2335	36155	24							330							
			OBS	0070	2329	36167	24							332							
			510		2259	3627	250		0029	668	0 2	240		316							
			0BS 5T0	0075	2259 2087	36266 3663	250 251		0077	1500	0.3			316							
			OBS	0100	2087	36625	25		0022	284	0.3	305		280 280							
			STD		1979	3665	260	_	0019	757	0.3	5 8		255							
			085	0125	1979	36647	260							255							
			STD		1915	3663	262		0018	410	04	05		242							
			OBS	0150	1915	36625	262							242							
			STD OBS	0200	1850 1850	3659 36586	263		0017	280	04	95		231							
			510		1826	3658	261 264		0016	018	0.5	80		231 232							
			STO		1799	3656	264		0016			64		232							
			OBS	0300	1799	36556	264		0010	010	0.0	, , ,		232							
			STD	0400	1738	3644	265		0016	331	0.5	129		230							
			OBS	0400	1738	36442	265							230							
			510		1659	3630	266		0015	875	0.9	990									
			085	0500	1659	36296	266		001/					221							
			STD OBS	0600	1490 1490	3598 3598Q	267		0014	689	1.1	43	15.	181							
			STD		1267	3564	269		0012	нон	1.0	80	15	120							
			OB5	0700	1267	35637	269		J U . E	300				120							
			510		1019	3527	271	15	0011	050	13	199	150)45							
			OBS	0800	1019	35267	271							946							
			085	0840	0917	35190	272						150								
			OB5 STD	0889 0900	0860 0799	35123 3507	273		0008	006	15	00		000							
			085	0900	0799	35067	273		0008	485	10	00		778 778							
			STD		0622	3505	275		0006	605	15	78									
			OBS	1000	0622	35046	275			, ,				25							
			SID		0522	3502	276	8 8	0005	543	16	38									
			OBS	1100	0522	35017	276						140								
			STD		0486	3501	277		0005	192	10	92		203							
			0B5 STD	1200 1300	0486	35014 3502	277		0004	0114	1.7	7, 7		903							
			085	1300	0460	35020	277		0004	706	1 /	42		909 909							
			STD		0440	3501	277		0004	834	17	91									
			OBS	1400	0440	35007	277				- '	- 1	149								
			STD	1500	0422	3501	277		0004	705	18	39									
			OBS	1500	0422	35005	277	79						27							

REFERENCE		,					_		DRICINI	ATOR'S				MAX.			-		CLOUO		Т		1
CTAY ID. CODE	LATITUDE	LDI	NGILIDE NOCTR	MARS DEN SDUARE	STATION TIL	WE	YEAR	CRUISE	5	TATION			TO I	DEPTH	OBS	WAVE ERVATION:	5	WEA- THER	CODES		-	NODC	
CODE NO.	1/1		- 17.10	10 1	MO DAY HI	-		NO.	1	UMBER	_	8011	TOM S	MPL'S	DIR.	HGT PER	SEA	CODE	TYPE AM		-	NUMBER	1
31 8007 EV	3515 N	1 06	020 W	115 50		27	1966	L_,_!	03		,	46	63	31	07	1 4		x 2	0 3	1	1	0051	ĺ
				COLOR		SPEED	BARC		ORY	MP. °C	VIS.	NO OE	O. 85.	SPEC	IAL								
				CDDE	TRANS DIR.	SPEED OR FORCE	(mbs		ULB	BULB	CODE	DEP	THS)BSERVA	HONS								
				DT	SD 07	510	28	1 2	06	183	7	2	8										
MESSENGA	CAST C	ARD	DEPTH (m)	1 °C	s ·4.	510	MA-T	SPECIFIC		ME S	A D		SDUN	10	02 ml/l	PO4-P	10	TA L-P	NO2-N	NO3-N	5104-	Si pH	5 0
HR 1/10	NO. 1	YPE	OEFTER WILL			3107	m A = 1	ANOM	ALY-XI	۰, ا	k 10 ³		VELOC	TITY	0.2 (4157)	μg - 01/1	P 6	- 01/1	μg - al/l	µg - 01/l	νΩ - οΙ	/ 1	č
																						1	
0.3		STD	0000	2389	3627		65	003	1298	2 0	000)	153										
027		BS STD	0010	2389 2390	36266 3627		65	003	305	0 0	033	3	153 153										
		85	0010	2390	36266		65				• • •		153										
		STD	0020	2390	3627		65	003	309	0 0	066		153										
002		BS BS	0020 0025	2390 2390	36266 36266		65						153 153										
		STO	0030	2390	3027		65	003	313	0 0	099		153										
		BS	0030	2390	36266		65						153										
		STD	0050	2390 2390	3627		65	003	320	3 0	166		153										
		BS STD	0075	2099	36267 3661		65	002	292	9 0	236		153 152										
		BS	0075	2099	36608		74	001		,	- 50		152										
		STD	0100	1949	3663	26	15	001	905	8 0	288	3	152	43									
		BS	0100	1949	36627		15	001	705		7 7 4		152										
		STO BS	0125 0125	1894 1894	3662 36618		29	001	. 785	4 0	334		152 152										
		STO	0150	1857	3659		36	001	724	4 0	378		152										
		BS_	0150	1857	36590		36						152	25									
		STO BS	0200	1818	3658		45	001	658	0 0	463	}	152										
		STD	0250	1804	36576 3657		45	001	646	2 0	545		152 152										
		STD	0300	1787	3655		51	001			628		152										
		BS	0300	1787	36547		51						152										
		STD BS	0400 0400	1744 1744	3647 36469		55	001	627	8 0	791		152										
		STD	0500	1700	3641		61	001	603	8 0	952	,	152 152										
		BS	0500	1700	36405	26				-	-		152										
		STD	0600	1539	3604		70	001	534	3 1	109		151										
		BS STO	0600 0700	1539 1321	36038 3571		70	001	338	0 1	253		151 151										
		BS	0700	1321	35707		92	001	220	, 1		•	151										
		STD	0800	1054	3534		14	001	114	9 1	376		150	59									
		BS STD	0800 0900	1054 0812	35340 3512		14	000	1107	0 1	1.71		150										
		BS	0900	0812	35117		37 37	000	802	9 1	476		149										
		STD	1000	0660	3503		52	000	727	1 1	556		149										
		BS	1000	0660	35031		52						149										
		STD	1100 1100	0562	3504		60	000	569	9 1	622		149										
		BS STD	1200	0562 0500	35044 3505		73	000	513	.2 1	677		149										
		Bs	1200	0500	35048		73	000	,,,,	- 1	011		149										
		STU	1300	0479	3506		76	000	490	6 1	727		149										
		BS STD	1300 1400	0479 0457	35055 3504		76	000		0 1	77.		149										
		BS	1400	0457	35042		78	000	460	8 1	776		149										
0 4 3		ВŚ	11478	0436	36430		900																
		STD	1500	0432	3503		79	000	468	6 1	b23		149										
		BS STD	1500 1750	0432	35026 3500		79 80	000	470	7 1	941		149 149										
		STD	2000	0377	3498	27		000			059		149										
0.43		BS	T2034	0374	34974	2.7				_			149										
0.43		STO BS	2500 T2 6 21	0331	3496 34960		85	000	456	0 2	491		150 150										
		STD	3000	0286	3494		87	000	437	9 2	514		151										
0 4 3	3 0	BS	T3112	0276	34937		88						151										

REFERENCE			1		-	MARSDEN	STATION T	I AA F			RIGIN	ATOR'S		DEPTH	MAX		WAVE	WEA	CLOU				
CTRY ID.	COOE	LATITE	1OE	LONGITUOE	DRUFT	SOUARE	GMTI	IME	YEAR	CRUISE		TATION		10	DEPTH	08	SERVATIONS	THER	CODE	s		TATE	ION
CODE NO.	+	<u> </u>	1/10	. 1/1	0 = =		MO DAY			NO.	١	UMBER	_	BOTTOM	S'MPL	S DIR	HGT PER SE	COO	TYPE A	vi T		NUN	BER
31/800	7 EV	3542	2 N	06050	w	115 50		081	1966		04			4612	15	06	4 4	X 1	0	3		00	52
						WA		VIND	- BAR	J• -	IR TEA		vis.	NO. 085.	SPE	CIAL							
						COLOR	TRANS. DIR.	FORC	100		JL8	WET	COD	OEPTHS	OBSER	ATIONS							
						DT	SD 06	_		5 2	11	194	7	25									
	MESSENG TIME	CAST	CAR		(m)	1 °C	5 %.	SIC	MA-T	SPECIFIC	VOLU	ME &	Δ. D.	50	DND	O 2 m1/1	PO4-P	TOTAL-P	NO ₂ -N	NO ₃ -N	5104	-Si	рН
	HR 1/1	or NO.	TYPE					,,,,		ANOM	ALY-XI		K 10 ³	, AET	OCITY	0 2 11.17	μg = σ1/l	µg = 01/1	μg - at/	μg - αl/	1 µg-0	01/1	P
		1	ĺ																	1			- 1
			S1			2340	3614		+70	003	252	3 0	000		323								
	0.8	1	089			2340	36139		470			_			323								
			\$1			2340	3614		+70	003	256	3 0	033		324								
			089 51			2340 2340	36139 3614		470 470	003	140	, ,	065		324								
	00	12	089			2340	36139		470	003	260	2 0	00:		326								
	•		083			2340	36139		470						327								
			SI			2340	3614		470	003	264	2 0	098		328								
			089	0.0	30	2340	36139	24	470						328								
			S1			2340	3614		470	003	272	1 0	163	15	331								
			089			2340	36139		470						331								
			089			2320	36375		494						332								
			51			2220	3653		534	002	672	7 0	237		309								
			089			2220	36527		534	007	1.07	7 0			309								
			51 089			2060 2060	3663 36628		586 586	002	186	1 0	298		273								
			51			1952	3660		512	001	944	1 0	350		247								
			089			1952	36597		512	001	,,,,	1 0	-) (247								
			S 1			1875	3657		530	001	783	3 0	396		230								
			089			1875	36569		530				- / -		230								
			51		00	1820	3657		544	001	670	1 0	483		222								
			089			1820	36566		544						222								
			SI			1802	3655		547		655		566		225								
			51			1781	3652		550	001	641	8 0	648		227								
			089			1781 1733	36524		550	001					227								
			51 085			1733	3643 36430		555 555	1001	630	0 0	812		228								
			S1			1639	3624		563	0.01	584	3 0	973		214								
			089			1639	36237		563	001	204	, ,			214								
			51			1440	3588		580	001	430	9 1	123		164								
			089			1440	35884		580		-				164								
			51		00	1162	3546		704	001	202	2 1	255		082								
			089			1162	35464		704						082								
			51			0930	3521		725	000	992	1 1	365		012								
			089			0930	35209		725						012								
			\$1			0753	3510		744	000	804	9 1	455		961								
			089			0753	35096 3503		744	000	672	0 1	h 7.		961								
			51 085			0586 0586	35026		761 761	000	623	9 1	52t		911								
			51			0527	3503		769	000	552	4 1	585		911								
			0B5			0527	35029		769	000			- 0 -		903								
			51			0498	3505		773	000	512	7 1	638		908								
			0B			0498	35045		773						908								
			51			0479	3505		776	000	495	0 1	688		917								
			OBS	1.3		0479	35049	2 -	776					14	917								
			S 1			0450	3504		778	000	473	5 1	737		922								
			089			0450	35039		778				٠.		922								
			51			0432	3503		779	000	467	9 1	784		931								
			089	15	UU	0432	35027	2	779					14	931								

										,					1				1		1	
REFERENCE	SHIP	LATITU	OE	LONGITUD	CTR	MARSDEN SQUARE	STATION TI	ME	YEAR		RIGINA			DEPTH TO	MAX. DEPTH	085	WAVE SERVATIONS	WEA-	CLOUD		١,	NOOC TATION
CODE NO.	CODE		1/10		E DON	l I	MO DAY H	1/10		CRUISE NO.	N.	TATION		BOTTOM	S'MPL'S	DIR	HGT PER SEA	- cons	TYPL AMI	1	N	UMBER
318007	EV	3605	N	06046		115 60	11 01		1966		04	1	\neg	4846	15	06		x1	0 3			0053
	, ,		'			WAI		IND	BARC	A	IR TEA			NO.	1		1 1 1	1	, 0, 5	1	1	0025
						COLOR	TRANS. DIR.	SPEED	METE	R D	RY	WET	VIS.	200	OBSERV							
						CODE	Im I	FORC		-+-	JLB	BULB	 - -	-								
		,				DT	50 06	507	7 31	2 2	06	167	7	29								
	MESSENGR TIME	CAST	CAR	O DEP	[H [m]	τ °c	s ·/	SIG	MA-T	SPECIFIC	VOLU	u.f ≥	△ D N. M. 10 ³	501	JND	O2 m1/1	PO ₄ -P	TOTAL-P	NO2-N	NO3-N	SI 04-Si	рн 9
	HR 1/10	I NO.	TYP	k .						ANDM		,	103	VELC	CITY		yg - 01/1	μg - οι/l	µg - a1/1	νg - α1/I	yg - 01/1	-
									1													
	1.05	,	S OB:		000	2323	3611		73	003	223	1 0	000		318							
	107	1			000	2323	36114 3611		·73 • 7 3	003	227	0 0	032		318 320							
			OB.		010	2323	36114		73	000	261	0 0	0 3 2		320							
					020	2325	3613		73	003	227	9 0	065		322							
	002	2	OB:		020	2325	36126		+73						322							
			08		025	2325	36126		+73		_				323							
			\$ 0B.		030 030	2325 2325	3613 36127		+73 +73	003	231	1 0	097		324							
					050	2332	3617		74	003	229	6 D	161		324 329							
			08		050	2332	36167		.74	000			-01		329							
			OB	S 0	067	2332	36189	24	76						332							
					075	2293	3637		01	002	985	1 0	239	15	326							
			08		075	2293	36480		100													
			06:		100 100	2084 2084	3671 36705		85	002	193	3 0	304		280							
					125	1991	3666		07	001	998	1 0	356		280 259							
			οв.		125	1991	36658		07	001	,,,	1 0			259							
			S	TD 0	150	1915	3662		23	001	847	5)	404		241							
			08		150	1915	36616		23						241							
					200	1802	3649		42	001	684	2 0	493		216							
			08:		200 250	1802 1775	36487 3647		42	0.0.1	4 / D		n 7/		216							
					300	1749	3645		548		649 616		576 658		216 217							
			08:		300	1749	36454		53	001	010	0 0	0 0 0		217							
					+00	1699	3639		60	001	581	7 0	d18		217							
			08.		400	1699	36387		60						217							
					500	1526	3603		72	001	484	2 0	971		177							
			OB S		500 600	1526 1274	36026 3565		572 596	001	262	1 1	108		177 106							
			ОВ		600	1274	35646		96	001	202	1 1	100		106							
					700	1000	3527		718	001	050	7 1	224		022							
			08	5 0	700	1000	35266	27	718		_	-			022							
					800	0820	3512		736	000	877	8 1	320		970							
			08		800	0820	35117		736					14	970							
			0B 0B		812 841	0762 0756	3508Q 35020		7410 737					1.4	951							
			08		881	0640	35037		155						912							
					900	0628	3505		757	000	655	8 1	397		911							
			08		900	0628	35045		757					14	911							
					000	0538	3503		167	000	557	4 1	458		168							
			08		000 100	0538 0502	35026 3503		767 772	000	610	0 1	5.1.1		891							
			08		100	0502	35027		772	000	519	4 1	511		893 893							
					200	0469	3503		775	000	485	9 1	562		896							
			08	S 1	200	0469	35027		775			•			896							
					300	0459	3503		776	000	484	1 1	610	14	909							
			0 B.		300	0459	35027		776	0.00	,				909							
			0 B		400 400	0432	3501 35010		778 778	000	470	5 1	658		914							
					500	0404	3501		781	000	445	7 1	704		914 919							
			ОВ		500	0404	35006		781						919							

REFERENCE				-1					RIGINA	1084			MAX.			1 -					i
CTRY ID: CDDS	LATITE	301	LONGITUDE	MARSDEN	STATION TH	^E	YEAR	CRUISE	\$T	ATION	\dashv	DEPTH	DEPTH	D89	WAVE ERVATIONS	THER	CLOUD			NODC	
CODE ND.		1/10	1/10	10. 1.	MD DAY HE	.1/10		ND.	N	UMBER	_	SOTTOM	S'MPL'S	DIR	HGT PER SEA	CODE	TYPE AM1	1		NUMBER	
31 8007 EV	3630	N C	06120 W	115 61		49	1966		04			4800	15	07	2 4	X 1	013			0054	
				WAT		ND SPEED	BARC		IR TEM		VIS.	ND.	SPEC	CIAL							
				COLOR	TRANS DIR.	OR	METE (mbs	R 5	JLB	WET	CODE	DEPTHS	DBSERV	ATIONS							
				DT	SD 09	518	32	5 2	88	178	7	30									
MESSENG	RCAST	CARD					1	SPECIFIC		. 5		-	מאנ		PD4-P	TOTAL-P				T .	7,
TIME HR 1/10	of ND.	TYPE	DEPTH (m)	1 ,C	5 %.	SIG	T-AN	ANOM	ALY-X10) Dy	∆ D N. M 10 ³	. VETO	DCITY	0 2 ml/1	yg - a1/1	μg - αl/l	ND2=N 99 - al/l	ND3-N 49 - at/l	SI D4-S		c c
188.77	+	 	+	+	· -					1		-			+						-+-
1	1	5 T	0000	2354	3626	24	75	003	206.	3 0	000	15	327		1	1	'		I	1	, ,
14	9	085	0000	2354	36257	24						15	327								
		51		2353	3626	24		003	207	5 0	032		329								
		OBS ST		2353 2359	36257 3626	24		003	2261		064		329								
0.0	12	085		2359	36259	24		003	220	3 0	064		332								
•	_	085		2359	36259	24							333								
		5 T		2359	3626	24		003	2301	8 0	097	15	334								
		OBS		2359	36259	24							334								
		0BS ST		2356 2340	36261 3628	24		003	1690		161		336								
		QBS		2340	36282	24		000	104	, ,	101		332								
		51	0 0075	2119	3663		70	002	330	1 0	429		284								
		085		2119	36629	25							284								
		ST		1949 1949	3662 36620		15	001	910	9 0	482		243								
		OBS ST		1871	3660	26 26	34	003	740	a n	328		243								
		OBS		1871	36602		34	001			- 20		225								
		ST	D 0150	1841	3657	26	39	001	702	3 0	371		220								
		OBS		1841	36567		39						220								
		ST OBS		1792 1792	3655 36554		50 50	001	611	9 0	454		214								
		51		1779	3653		51	an 1	615	5 0	535		214								
		ST		1759	3650		54		607		b15		220								
		0B5		1759	36499		54						220								
		51		1698	3639		60	001	579	4 0	774		217								
		0B5		1698 1557	36387 3609		70	00.1	504		929		217								
		0B5		1557	36093		70	001	204	0	723		187								
		ST		1319	3568		90	001	325	4 1	070		122								
		089		1319	35683		90					15	122								
		51		1047	3530		12	001	110	7 1	192		040								
		089		1047 0812	35298 3511	_	12		073		101		040								
		S1 0B5		0812	35106		36	000	873	1 1	291		967								
		085		0720	35067	_	40						936								
		OBS		0720	35094		49					14	939								
		51		0659	3507		55	000	684	5 1	369		924								
		0B5		0659 0613	35067 35042		55						924								
		OB 9		0562	35023		64						897								
		0B9		0573	35053		65						904								
		51		0553	3503		65	000	578	0 1	432		897								
		085		0553	35026		65						897								
		ST		0496	3502 35019		72	000	517	8 1	487		891								
		0B5		0496 0460	35019		72	000	488	9 1	537		891								
		0 B S		0460	35008	_	75	000			1		892								
		51		0440	3500		76	000	478	6 1	586		901								
		OBS		0440	35000		76					14	901								
		51		0421	3500 34999		78	200	454	0 1	033		910								
		089		0421 0421	34999		78	0.01	460	3 1	679		910 947								
		089		0421	35017		80			- 4			927								

REFERENC	· T				7.1		CT A THOM: TI			_	DECIN	ATOR'S			T MAX.		WAVE	T	CLOUO	T	1.		
CTRY IC	SHIP	LAT	TUDE	LON	GITUOE	MARSDEN SOUARE	STATION TI	ME	YEAR	CRUISE	S	TATION	-	TO TO	DEPTH	089	ERVATIONS	THER	CODES		51	ATION	
CODE NO	D. COO.	-	1/10		1/10	10" 1"	MO OAY H			NO.	- 1	NUM8ER		BOTTOM	S'MPL'S		HGT PER SEA	CODE	TYPE AMI	1		JMBER	
31/80	07 EV	36	62N	06	138 W	115 61		176	1966		04		\perp	4938	15	10	2 2	×1	0 3			0055	
						WA		IN D SPEED	BARC			MP. °C	vis.	NO. 085.	SPEC	CIAL							
						COLOR	TRANS. OIR.	OR	M ETE		DRY ULB	WET	CODE	OEPTHS	OBSERV	A TION S							
						DT	SD 06	520		_	28	178	7	26									
			_						\perp					<u> </u>									П
	TIM.	GR CAS	T CA		OEPTH (m)	T °C	s */	SIG	MA-T	SPECIFIC	ALY-XI	,5 D	△ 0 (N. M (10 ³	. SOI	OCITY	0 2 ml/l		OTAL-P ug = 01/1	NO2-N ug - al/l	NO3-N µg - at/1	SI O4-Si yg • at/I	ρН	Š
	HR 1/	10											10-	+-	-		-		-	-			Ĥ
				TD	0000	2263	3630	25	05	002	923	ا ه	000	1 15	305			- 1	- 1			-	I
	1	76	OB		0000	2263	36300		05	002	,,,,	, ,	•00		305								
	-			TD	0010	2263	3630		05	002	927	8 0	029		307								
			0B	S	0010	2263	36300	2.5	05					15	307								
				TD	0020	2263	3630		05	002	931	7 0	059		309								
	Λ	0.2	08		0020	2263	36300		05						309								
			OB		0025	2263 2263	36300		05	003	026	7 ^	0.00		309								
			08	c 10	0030	2263	3630 36300		05	002	935	7 0	088		310								
				TD.	0050	2263	3630		04	002	944	2 n	147		314								
			ОВ		0050	2263	36299		04	002		- 0			314								
			ΟВ		0066	2263	36298		04						316								
				TD	0075	2128	3641		51	002	514	0 0	215	15	284								
			ОВ		0075	2128	36407	2.5							284								
				TD	0100	1980	3661		06	001	998	0 0	271		251								
			ОВ	5 TD	0100 0125	1980 1901	36607 3659		06 25	001	825	0 0	319		251								
			0 B		0125	1901	36587		25	001	023	0 0	219		233								
				ŤD.	0150	1849	3657		37	001	720	9 0	363		222								
			ОВ		0150	1849	36568		37						222								
				TD	0200	1809	3656	26	46	001	647	3 0	448	15	219								
			08		0200	1809	36561		46						219								
				TD	0250	1787	3654		50		627		530		221								
				TD	0300	1765	3651 36508		53	001	615	4 0	611		222								
			OB	5 TD	0400	1765 1720	3642		53	001	603	0 0	772		222								
			QB		0400	1720	36424		58	001	00)	9 0	112		224								
				TD	0500	1641	3628		66	001	554	9 0	929		215								
			08	S	0500	1641	36284	26	66					15	215								
			08		0560	1499	36002	26							178								
				TD	0600	1457	3593		80	001	437	5 1	079		170								
			0B	S TD	0600 0700	1457 1210	35925 3554	26	80 00	001	241	2 1	210		170								
			0B		0700	1210	35537	27		001	c 4 1	1 ر	213		100								
				TD	0800	0940	3518		22	001	027	5 1	326		016								
			08		0800	0940	35184	27			/	•			016								
				TD	0900	0744	3507	27	43	000	812	2 1	418		957								
			ОВ		0900	0744	35067	27							957								
				TD	1000	0591	3501		59	000	644	9 1	491		912								
			0B	5 TD	1000 1100	0591 0521	35007 3502	27	59 69	000	548	۷ ,	551		912								
			08		1100	0521	35023	27		000	J + Ø	0 1	ノコー		901								
				TD	1200	0478	3500		72	000	518	0 1	604		900								
			ОВ		1200	0478	35001	27				•			900								
				TD	1300	0465	3502		75	000	500	2 1	655		911								
			ОВ		1300		35016																
				1D	1400	0448	3503		78	000	478	1 1	704		921								
			OB	S TD	1400 1500	0448 0427	35029 3501		78 79	000	. 7.3	c ·	76.		921								
			0 B		1500	0427	35010	27		000	473	١ د	752		929								
				_			22010																

REFERENCE						MARSDEN	STATION	TIME			RIGINA	ATOR'S		DEPTH	MAX.		WAVE	WEA-	CLOUD			100C	
CTRY ID.	HIP DDE	LATITU		LONGITUD		SOUARE	(GM	7)	YEAR	CRUISE	5	TATION		TO	DEPTH OF		ERVATIONS	THER	CODES		S1	ATION UMBER	
			1/10		/10		MO DAY			NO.		UMBER	-		S'MPL'S		HGT PER SEA	+	TYPE A.M.1				
31 8007 6	: V	3724	5N	06200	W]	115 72	11 01		1966	L., J	04		,	5029	15	10	3 2	X 1	013	l		0056	1
						COLOR	1	WIND	D BARC		RY	MP. °C	VIS	NO.	SPEC	IAL							
						CODE	TRANS. DI	R. OF	t-h		JEB	BULB	CODE	DEPTHS	OBJEKA	- 11014.3							
						DT	SD 1	3 51	5 32	2 2	28	189	7	27									
MES	SSENGR	CAST	CARD	D50	[H (m)	T °C	5 %.	514	SMA-T	SPECIFIC	VOLU	ME ₹	ΑP	sou		O 2 ml/l	PO4-P	TOTAL-P	NO2-N	NO3-N	SI O4-Si	- 41	S
HR	1/10 1	NO.	TYPE	Der	in thi		, "	310	3mn-1	ANDM	ALY-X10	۰' ا	△ D (N. M (10 ³	. VELC	CITY	O 2 mi/ r	µg + a1/1	µg - 01/1	μg - α1/I	yg - a1/1	µg - at/l	pН	č
'			ST		000	2299	3626		491	003	053	6 0	000		314								
	205		0 B S		000 010	2299 2298	3625 3626		491 491	003	054	0 0	021		314 315								
			ST OBS	-	Ú10	2298	3625		491	003	054	0 0	031		315								
			ST		020	2300	3626		491	003	063	5 0	061		317								
	002		OBS		020	2300	3625		491						317								
			OBS ST		025 030	2300 2300	3625 3627		491 491	003	060	3 0	092		318 319								
			089		030	2300	3626		491	000	000	, ,	0 7 2		319								
			ST	D 0	050	2287	3630		498	003	008	5 0	152		320								
			OBS		050	2287	3630		498						320								
			ST OBS		075 075	2120 2120	3657 3656		565 565	002	376	8 0	22C		284								
			ST		100	1960	3661		611	001	947	0 0	274		284 246								
			085	0	100	1960	3660		611			•			246								
			ST		125	1906	3661		625	001	821	4 0	21 ك		235								
			OBS		125	1906	3660		625	001	7.0		2		235								
			ST OBS		150 150	1859 1859	3657 3657		635 635	001	740	8 0	365		225 225								
			ST		200	1811	3656		646	001	649	9 0	450		220								
			085		200	1811	3656		646						220								
			ST		250	1797	3655		648		644		533		224								
			ST OBS		300 300	1780 1780	3653 3652		651 651	001	636	6 0	615		227 227								
			ST		400	1734	3645		656	001	618	7 0	777		229								
			085		400	1734	3644		656			,			229								
			ST		500	1676	3634		661	001	597	9 0	938		226								
			OBS		500	1676	3633 3599		661	001	676	0 1	092		226								
			ST OBS		600 600	1494 1494	3598		676 676	001	474	. 0 1	092		183								
			ST		700	1296	3562		690	001	349	8 1	233		130								
			085	0	700	1296	3562		090						130								
			ST		008	1034	3532		716	001	094	8 1	355		052								
			08s		800 900	1034 0814	3531 3508		71b 734	000	911	6 1	455		984								
			085		900	0814	3508		734	000	711	0 1	100		984								
			ST		000	0648	3502		753	000	715	3 1	537		935								
			OBS	1	000	0648	3502		753					14	935								
			OBS		015	0603	3497		755						919								
			08s		025 050	0616 0562	3503 3497		758 760						927								
			ST		100	0523	3499		766	000	577	7 1	601		909								
			085		100	0523	3498		766	200					901								
			ST		200	0481	3499		771	000	531	5 1	657		901								
			089		200	0481	3498		771	000	61.		700		901								
			ST OBS		300 300	0460 0460	3499 3498		773 773	000	514	. 0 1	709		909								
			ST		400	0442	3499		775	000	500	0 1	760		918								
			OBS	1	400	0442	3498		775						918								
			\$1		500	0432	3497		775	000	513	2 1	811		930								
			089	1	500	0432	3496	0 2	775					14	930								

CE D.	SHIP	LATITUO		GITUDE EN	MARSDEN SQUARE		ON THE	١	EAR	ORIGINA RUISE ST	TOR'S ATION UMBER	\dashv	OEPTH DEPT TO OF S'MP	H OBS	WAVE SERVATIONS HGT PER SE	WEA- THER CODE	CLOUD			NODC TATION TUMBER
107	Ev	3744	N 06	217 W	115 72	11			966	049			5030 1	-1-		X1	0 3	1		0057
,				- 1	WA			IND	BARO-	AIR TEM		1		ECIAL	12121	1 // 1	. 0, 5	1	1	000
					COLOR	TRANS.	DIR.	SPEED OR FORCE	METER (mbs)	ORY BULB	WET BULB	CODE	001 3	EVATIONS						
					0.1	SD	12	S15	3 3 5		161	7	24							
Γ.	wessen G#				T 1				Ч.	PECIFIC VOLUA	., \	Δo	SOUND	Τ '	PO4-P		110. 11	NO 41	\$104-\$1	
	TIME 0	CAST	CARO TYPE	DEPTH (m)	τ *c	S	•/	SIGM	\-T '	ANOMALT-110	ים "י	∆ 0 N. M. 10 ³	VELOCITY	O ₂ mI/1	ug - a1/1	TOTAL-P ug · at/l	NO2-N yg - at/l	NO3-N yg - at/l	yg - 01/1	
ľ						1														
-		1	STD	0000	2322	36	19	247	9	0031626	5 0	000	15319	1	,		'			
	114		085	0000	2322	36	194	247	9				15319							
			STD	0010	2323	36	19	247	9	003170	1 0	032	15321							
			OBS	0010	2323	36	193	247	9				15321							
			SID	0020	2323	30	19	247	9	0031740	0 0	063	15322							
	0.02		085	0020	2323	36	193	247	Q				15322							
			OBS	0025	2323	36	193	247	9				15323							
			STD	0030	2323	36	19	247	9	003178	0 0	095	15324							
			OBS	0030	2323	36	193	247	9				15324							
			STD	0050	2324	36	20	247	9	003182	2 0	159	15328							
			OBS	0050	2324	36	202	247	9				15328							
			085	0069	2325	36	222	248	1				15331							
			SID	0075	2230	36	63	253	9	002627	7 0	231	15313							
			OBS	0075	2230	36	627	253	9				15313							
			STD	0100	2100	36	69	258	0	002244	4 0	292	15284							
			OBS	0100	2100	36	692	258	0				15284							
			STD	0125	1990	36	65	260	6	002004	2 0	345	15258							
			OBS	0125	1990	36	646	260					15258							
			STD	0150	1904	36	59	262	5	0018370	0 0	393	15238							
			085	0150	1904	36	593	262	5				15238							
			STD	0200	1839	36	56	263	9	001720	2 0	482	15228							
			OBS	0200	1839	36	560	263	9				15228							
			STD	0250	1814	36	55	264	.4	001684	6 0	567	15228							
			SID	0300	1792	36	54	264	9	001659		651	15230							
			OBS	0300	1792	36	536	264	9				15230							
			STD	0400	1755	36	46	265	2	001658	B Q	817	15235							
			OBS	0400	1755	36	462	265	2				15235							
			SID	0500	1699	36	36	265		001634	7 0	982								
			OBS	0500	1699	36	359	265					15234							
			STD	0600	1578	36)9	266	6	001580	8 1	142	15210							
			OBS	0600	1578	36	J94	266					15210							
			STD	0700	1362	35	76	268		001384	1 1	291	15154							
			OBS	0700	1362	35	761	268					15154							
			STD	0800	1126	35	4 ب	270	8	001181	9 1	419	15086							
			OBS	0800	1126	35	431	270	8				15086							
			STD	0900	0890	35	18	272	9	000967	4 1	526	15014							
			085	0900	0890	35	177	272	9				15014							
			STD	1000	0648	35	01	275		000727	0 1	611	14935							
			OBS	1000	0648	35	U07	275	2				14935							
			STD	1100	0524	34		276		000586	4 1	677								
			OBS	1100	0524		977	276		- 0	-		14901							
			STD	1200	0492	34	99	277		0005434	4 1	733	14905							
			OBS	1200	0492	34	992	277					14905							
			STD	1300	0460	35	JO.	277		0005030	0 1	786								
										_	_									
			OBS	1300	0460	35	UU 3	277	4				14909							
			085 S T D	1300 1400	0460 0448	35		277		000499	3 1	636								

REFERENCE	SHIP		1		= #		SDEN		ION T				ORIGIN	ATOR	s	DEPT		MAX. DEPTH		WAY		WEA					NODC
TRY ID.	CODE	LATITU	1/10		1/10 E	10*	ARE		IGMT)		YEAR	CRUIS NO.		TATIO		BOTTO		OF	0.0		TIONS	THER	CO	!			TATION
31800	1 1	3744		0.6	217 W	115	+ - +	_		0.07.5		-	04		E N	-	-	S'MPL"	+	+ 1	PER SEA	^	TEPE			-+-	
21/000	A CA	3144	. N	002	:1/ W	113					966					503	10	30	10	[[3]	4	X1	8	2			0058
							WA	_	_	SPEED	BARG)·	AIR TEA	-	- VIS	NO.	- 1		CIAL								
							COLOR	TRANS.	DIR	OR	METE (mbs		DRY BULB	W E BUL		DEPTH		VR328O	A TION S	1							
							-		12	515	33	5	206	16	1 7	0.7	,			1							
	MESSENGE TIME HR 1/10	약 NO.	C AF		DEPTH (m)	т	70	s	•4.	SIGM	,	SPECIF	C VOLU	ME	∑ ∆ 0 0 N. A x 10 ³	À. 5		ND CITY	02 ml/		04=P - q1/1	TOTA (=P pg = q1/1	NO ₂ -		NO3~N yg + al/l	\$1.04=\$i ug = at/1	рН
								T		1				\neg										\top		 -	
	1	1	S	TD '	0000	2	328	36	19	241	77 '	0.0	3182	9	0000	0 1	. 5 3	320		- 1	- 1		I	-			1
	0.0	5	08	S	0000	4	328	36	189	24	7 7							320									
	0.0	5	0B	S	0009	Ž	213	36	205	251	1.2					1	. 5 2	293									
	0.0	5	0.8	5	T1375	C	448	34	965	27	73					1	40	916									
			S	TD	1400	C	1445	34	96	271	73	0.0	0524	6		1	49	919									
			5	TD	150u	C	434	34	96	27	74	00	0519	5		1	49	931									
				TD	1750	C	1408	34	95	277	76	00	0514	6		1	49	962									
	30	5	08	5	T1939	C	1390	34	949	277	78					1	49	987									
				TD	2000	0	387	34	95	27	78	0.0	0507	1		1	40	996									
	0.0	5	08	S	T2429	C	349	34	955	278	3.2					1	.50	053									
			5	TD	2500	C	1340	34	95	278	3 3	001	0475	ь		1	50	062									
	20	5	08	S	T 2900	C	277	34	947	278	39					1	5]	104									
			S	TD	3000			34	94																		
	00	5	08	5	3000	0	3170	34	938	278	340																

REFERENCE			-	# MARSOEN	STA	TION TI	ME		ORIGI	NATOR'S		DEPTH	MAX. DEPTH		WAVE	WEA-	crono			NOOC STATION
CTRY IO. CODE	LATITU		LONGITUDE			(GMT)		YEAR	CRUISE NO.	STATIO		10 80110 <i>M</i>	0.5	1	SERVATIONS	THER	TYPE AMI	1		STATION NUMBER
	2011	1/10	06240 W	10	11	DAY H		1966		46	_	5141	15	15	HGT PER SEA	-			-+-	
318007 EV	3810	N	00240 W		TER		INO	1 4 00		4 O EMP. ℃			1 2	1 12	2 2	X1	013	l	- 1	0059
				COLO	_	+	SPEED	BARO		WET.	VIS.	9 082	SPE	JAL						
				C00	(m)	OIR.	FORCE	(mbs)		BULE		OEPTHS	OBJEKY	A 110143						
				DT	SC	13	520	32.	2 222	17	2 7	25		i	ļ					
MESSENGR	CAST	CARC			Τ.	.,			SPECIFIC VOL	UME	≨ ∆ 0	so	UND		PO4-P 1	OTA L-P	NO2-N	N03-N	5104-5	
TIME (NO.	TYPE	DEPTH (m	1 70	,	٠/	SIGN	T-A	ANDMALT-	£107	x 103	A. VEL	OCITY	02 ml/l		yg = 01/1	yg - al/l	μg - σ1/(µg - q1/	
77.10	-	-			1					\neg										
1	1	' s r	0000 ' a	2316	36	20	24	81	00314	5 3	0000	ว่ไร	317		1	,	,			
0.39	9	OBS		2316		195	24						317							
		ST		2315		20	24		00314	65	0031		319							
		OBS		2315		195	24.		00715				319							
		ST		2316 2316		195	24		00315	32	J - 6.		341							
		0BS	-	2316		195	24.						321							
		5 T		2316		20	24		00315	71	0099		322							
		085		2316		195	24		30323				322							
		ST		2316	36	20	24	81	00316	50	0158		326							
		065		2316		195	24	81				15	326							
		ST		2316		20	24		00317	41	023		330							
		085	-	2316		196	24						330							
		085		2316		196	24.		2076	c =	0.417		332							
		ST 0BS		2227 2227		55 549	25 25		00268	22	0 ا د 0		316							
		ST		2030		63	25		00211	6.1	0370		269							
		085		2030		632	25		00211	0 1	0		269							
		ST		1951		63	26		00192	54	0421		252							
		OBS		1951		632	26						252							
		ST	D 0200	1844	36	58	26	39	00172	0.7	0512	2 15	229							
		OBS		1844		576	26						229							
		ST		1819		55	26		00169		029		230							
		ST		1799		53	26		00168	19	0682		232							
		OBS		1799 1777		528	26		00166	<i>-</i> ,	00.0		232							
		ST OBS		1777		525	26 26		00166	26	0849		242							
		ST		1725		43	26		00164	51	1015		242							
		OBS		1725		429	26						242							
		ST		1610		21	26		00156	71	1175		221							
		OBS	0600	1610	36	213	26	67					221							
		ST		1424		87	26	8 2	00143	70	1326	5 15	175							
		085		1424		868	26						175							
		ST		1201		54	27		00124	86	1460		113							
		085		1201		537	27		00103				113							
		51 085		0948 0948		23	27. 27.		00103	0.8	1574		036							
		ST		0690		00	27		00079	Ω 3	1665		951							
		085		0690		995	27		00017	ر ن	100,		951							
		ST		0541		97	27		00061	71	1736		908							
		OBS		0541		967	27			-			908							
		ST		0517	3 5	02	27	69	00055	56	1799	5 14	916							
		OBS		0517		022	27						916							
		ST		0473		200	27		00051	03	1848		915							
		OBS		0473		017	27						915							
		5.T		0455		02	27	-	00049	64	1898		924							
		OBS ST		0455 0438		017	27 27		00048	3 2	1947		924							
		0BS		0438		017	27		00048	د ر	174		934							
		903	1,500	0430	۔ ر	- 11	21	. •				. 4	9,54							

TABLE IV .-- Continued

ID. NO.	SHIP	LATITU	DE LC	NGITUDE NOTION	MARSOEN SQUARE	STATION (GMT	TIME YEA			TOR'S ATION IMBER	DEPTH TO BOTTON	OEPTI	085	WAVE ERVATIONS		CODES	7	5.1	NODC TATION UMBER
1007	Ēν	3835		5258 W	115 8		072 19	66	047		4800			2 4	x 1				0060
,			- 1			1			AIR TEM			1		12121	1 ^ -	1 013	1	1	0000
					cor	00 1-1	T	BARU-	ORY	WET COD	NO.	00110	ECIAL VATIONS						
					CO		FORCE	(mbs)	BULE	BULB	DEPTHS	S	7 4 110 17,						
					D	T SD 10	520	322	222	178 7	26	1							
	MESSENG	B CATT	C+10		1		<u>'T'-</u>		C AOTAW	. \$ \ 0	1.0			T					
	TIME	CAST NO.	CARD	DEPTH (m)	7 7	s ·/	SIGMA-	T SPECIAL	ALT-1107	£ ∆ C OYN. A x 10 ³	. VEL	OCITY	02 m1/1	PO4-P	101AL-F	NO2-N pg - at/1	NO3-N 1/10 - QU	51 O4=51 ug = 61/1	рН
-	HR 1/10	1		+	-	-		-		X 10°	-			+**	-	1			-
		1 1	4-0	0000	202														ĺ
	0.7	2	STD	0000	232		2482		31347	0000		5319							
	0 /	2	STD	0000	232 231		2482 2482		21/02	003		5319							
			085	0010	231				31402	003		5320 5320							
			STD	0020	230		2485		31151	006		5319							
	0.0	2	085	0020	230				21121	. 006.									
	00	-	085	0025	230							5319 5320							
			STD	0030	230		2485		31190	009		5321							
			OBS	0030	230				J 4 4 7 U	. 004		5321							
			STD	0050	230		2485		31254	0156		5324							
			085	0050	230			-	> ¬	V- 20		5324							
			STO	0075	230		2485	00	31345	023		5328							
			OBS	0075	230							5328							
			OBS	0085	230	9 36225	2486				1.5	5330							
			STD	0100	218	5 3659	2548	00	25450	0306	1 9	5305							
			OBS	0100	218	5 36587	2548				15	5305							
			STD	0125	204	0 3667	2594	00	21164	0364	. 15	5272							
			OBS	0125	204		2594				1.5	5272							
			STD	0150	196		2614	00	19378	0414	. 15	5254							
			OBS	0150	196							5254							
			STD	0200	183		2639		17122	0506		5228							
			085	0200	183		2639					5228							
			STD	0250	181		2645		16774			5230							
			STD	0300	179		2649		16557	0674		5231							
			OBS	0300	179		2649					5231							
			STD OBS	0400	175 175		2654 2654		16422	0839		5235							
			STD	0500	167				16003	100		5225							
			OBS	0500	167		2661 2661		10003	100.		5225							
			STD	0600	148		2677		14639	1154		5178							
			085	0600	148				0	1131		5178							
			STD	0700	124		2694		13077	129		5115							
			OBS	0700	124							5113							
			STD	0800	100		2718		10677	1+1		5042							
			OBS	0800	100	7 35289	2718				15	5042							
			STD	0900	074		2741	000	08338	1506	14	4958							
			085	0900	074						14	958							
			085	0941	065						14	4929							
			STD	1000	059		2759		06491	158.		+913							
			085	1000	059							4913							
			STD	1100	052		2767		05637	164		+904							
			OBS	1100	352		2767					4902							
			STD	1200	047		2772	000	05151	109		897							
			085	1200	047		2772					+897							
			STD	1300	045		2775	200	34902	1746		907							
			08s GTS	1300 1400	045			0.0	14.00-	170		4907							
			095	1400	043		2776		34907	1799		4915							
			510	1500	043		2776		700	1 47		+915							
			085	1500	041		2776	000	790	1046		+925							
			003	1000	041	0 24486	2778				14	925							

CTRY ID.	SHIP	LATITU	DE LO	NGITUDE HO	MARSDEN SOUARE	STATION TO	ME YE	A R	CRUISE	ATOR'S		DEPTH TO	MAX. DEPTH OF	OBS	WAVE SERVATIONS		ER	CODES		5	NODC TATION TUMBER
CODE NO.	= = ;	39.1	1/10	1/10 =		MO DAY HE				NUMBER		801104	3 1417 6 3			EA CO	+	TPE ANT		-	
31/800		-, 7	N DI	2314 M	115 93 WAT		03 19	BARC	AIR TE	+ 8 MP. ℃	\top^{\perp}	493d	1	15	4 3	X	2	0 3		1	0061
					CDLOR	TRANS DIR.		METE (mbs	R DRY	W E1	CODI		OBSERV.	ATIONS							
					DI	5D 14	S25	3.1		18	3 7	3 8									
	MESSENCI			_	T	30 14	1					1			1	Τ	Ε			T	
	MESSENGE TIME HR 1/10		TYPE	DEFTH (m)	т *с	s ·4.	SIGMA	-1	ANOMALT-E	10,2	ΣΔ D 17N, M x 10 ³	- VEL	OCITY	D ₂ ml/l	PO4-P ug - a1/1	FOTAL-		02-N 2-01 L	NO3-N	S1 O₄=\$i \sq - qt/	рН
	748 1710					1									1		_				
			STD	0000	2543	3621	2414	4	00376	39 (0000	1.5	372				,			ı	'
	10	3	085 STD	0000 0010	2543 2545	36208 3621	2414		00379				374								
			085	2010	2545	36208	2414		00319.	, ,	3038		374								
			STD	0020	2545	3621	2414		003798	30 (0076		376								
	0.0	2	OBS	0023 0025	2545	36208 36208	2414						376								
			085 STD	0030	2545 2545	36208	2414		00380	21 (0114		376								
			085	0030	2545	36208	2414						377								
			STD	0050	2545	3621	2414		00381)3 (190		381								
			055 085	0050 0070	2545 2545	36236 36211	2414						381								
			STD	0075	2499	3632	2436		003601	38 (283		375								
			OB5	0075	2499	36322	2436						375								
			STD OBS	0100	2295 2295	3636 36359	2500 2500		003008	34 (3365		330								
			STD	3125	2170	3673	2563		002415	50 0)433		307								
			065	0125	2170	36725	2563						307								
			013 260	0150 0150	2028	3665 36656	259°		002102	0 (490		273								
			STD	0200	1825	3648	2636		00174	72 () > 86		273								
			085	0200	1825	36476	2636				00		223								
			055	0216	1823	36427	2632		0.01				224								
			STD	0250 0300	1720 1581	3631 3612	2649		001636) o 70) 748		198 164								
			OBS	0300	1581	36117	266		00141		, , 40		162								
			OBS	0365	1424	35827	2679						120								
			055 510	0361 0400	1241 1222	3544 <u>1</u> 3549	2687		001225	. 7 (83(057								
			085	0400	1222	35486	2694		00122.	, ,	, • 0 5		054								
			065	0410	1222	35490	2695						056								
			085 085	0426 0440	1147 1160	35407 35427	2702						031								
			OBS	0450	1130	35367	2702						029								
			OBS	0475	0880	34999	271	7					937								
			510 260)500 0500	0899 0899	3502 35017	2715		00102	19 (996		949								
			085	0508	0981	35250	2715						949								
			085	0528	0980	35252	2720)					986								
			065 STD	0580	0825 0791	35087 3502	273		000071	0 1	000		935								
			OBS	0600	0191 0820P		2728		000871		090	14	925								
			SID	0700	0629	3498	2752	2	000678	88 1	168		877								
			055 065	070U 0756	0629 0543	34977 34897	2752						877								
			CB5	0785	0543	35017	2756 2766						851 857								
			STD	0833	0520	35∪1	2768		000521	.0 1	228		850								
			2B5 STD	0800 0900	0520	3493P 3499	2762		200521				0.5.0								
			OBS	0400	05 J U	34989	2769		000522	. 2	480		859								
			STD	1000	0480	3501	2773	3	000494	3]	331	14									
			OB5 STD	1000	0480 0456	35007 3501			000: 70		130		867								
			OBS	1100	0456	35007	2775		000473	9 1	379		874								
			STD	1200	0438	3500	2777	7	000463	30]	426	14	685								
			OFS	1200	0438	35004	2777		000 5				883								
			STD OBS	1300 1300	0422	35UC 34998	2778 2778		000456	94	472		893 893								
			STD	1400	0420	3500	2779		000459	7	.⊃18		909								
			∩5s	1400	0420	35003						14	909								
			\$T0 280	1500	0419 0419	3501	2779		000465	0 1	264										
			202	1500	0419	35007	2779	4				14	926								

											•	Ŭ	0110.		Cu											
REFERENCE	IP	LATITU	ne .	LONG		C M	MARSOEN SOUARE	STATION TI	ME	VEAD			A TOR'S		DEPTH	MAX. DEPTH	0.0	WAV	E	WEA-		2		N	IODC	
CODE NO. COL	DE	LAINIO	1/10		1/10	NOCTE		MO DAY H	R.1/10	YEAR	CRUISE NO,		TATION TUMBER		TO BOTTON		DIR.		ER SE.	COOE	TYPE A			ST NI	ATION .	
318007 E	v	3925	N	063	47 W	T			126	1966		04	9		4938	1	12		2	X 2	0				0062	
							WAT	ER V	IND	BARO			48. °C	vis.	NO.	SPEC	TAL]	'					,	0000	
							COLOR	TRANS. DIR.	SPEED OR FORC			RY ILB	WET	CODE	OEPTHS	OBSERV	ATIONS									
							DT	50 14	525		8 2	39	178	7	38			1								
MESS	ENGR	CAST NO.	ÇA	10	DEPTH (r		1 %	5 %.	1		SPECIFIC	VOLU	ME S	A D	50	UNO		PD	4-P	TOTAL-P	NO2-N	NO ₃	-N	5104-51		S
HR	ME 9	NO.	TY	PE	DEFIN W	• 1		3 %	1 210	MA-T	ANOMA	LY~11(7 0	x 10 ³		DCITY	O2 m1/		01/1	μg • ol/l	ug - 01/	n8 - 6		μg - α1/I	pН	c
																										T
	126		S OB	TD <	0000		2411 2411	3592 35916		32	003	512	7 0	000		337										
				TD	0010		2411	3592		32	003	516	7 0	036		339										
			OB		0010		2411	35916		32						339										
			0 B	TD S	0020		2408 2408	3591 35913		33	003	614	3 0	072		340										
			ОВ		0025		2405	35911		34						340										
				TO	0030		2398	3587		33	003	620	9 0	108		339										
			08	5 T0	0030		2398 2398	35870 3587		33	003	620	0 0	101		339										
			0B		0050		2398	35870		33	003	U 4 0	→ U	181		342										
			ОВ		0070		2400	36457	24	76					1.5	352										
			S 0 B	10	0075		2340 2340	3650 36497		97 97	003	024	1 0	264		339										
				TD	0100		2154	3654		54	002	493	4 0	333		297										
			0В	S	0100)	2154	36544	25	54					15	297										
			S 0В	TD	0125		1979 1979	3651 36507		98	0021	076	9 0	390		254										
				7 D	0150		1859	3645		25	001	831	3 O	439		254										
			08	S	0150)	1859	36449		25						224										
				TD	0200		1760	3639		45	001	657	2 0	>26		203										
			0B 0B		0200		1760 1619	36387 36100		,45 ,57						203										
			ОВ		0249		1464	35694		60						112										
				T O	0250		1476	3572		60	001	523	9 0	606		116										
			0 B 0 B	-	0256		1530 1260	35826 35431		56 82						048										
				T0	0300		1269	3553		88	001	260	0 0	675		054										
			08	S	0300		1269	35527	26	88					15	054										
			08		0310		1297 0974P	35626		90					15	066										
			0B 0B		0330		1106	3510P 35352		09P					15	003										
			0В	S	0355	•	1106	35346		05						004										
				TD	0400		1002	3526		17	000	992	3 0	788		974										
			0B 0B		0400		1002 1000	35262 35257		17						974										
			ОВ		0430		0904	35134		24						941										
			ОВ		0450		0860	35126		30						927										
			OB S	S TD	0481		0857 0813	35138 3511		31	000	810	2 ^	879		932										
			0 B		0500		0813	35108		36	0,00	U 1 7	. 0	019		918										
			ОВ	S	0540)	0719	35006	27	42					14	887										
			S 08	TD S	0600		0658 0658	3505 35050		54	000	650	お 0	952		873										
				5 T D	0700		0533	3500		65	000	536	7 1	011		839										
			ОВ	S	0700)	0533	34995	27	65					14	839										
			S OB	TD c	0800		0493	3501		71 77P	000	486	2 1	063	14	839										
				5 TD	0800		0493 0470	3508P 3502	_	74	000	464	5 1	110	14	847										
			ΟВ	S	0900)	0470	35015				- '	•	- • 0		847										
				TD	1000		0447	3501		76	000	451	9 1	156		854										
			OB S	S TD	1000		0447	35007 3501		'76 '78	000	443	4 1	201		854										
			0 B		1100		0434	35010	27		000	3	→ 1	- 01		865										
			S	TΟ	1200)	0419	3500	27	79	000	442	2 1	445	14	875										
			0 B	S TD	1200		0419 0409	34999 3500		79 80	000	440	4 1	289		875										
			0B		1300		0409	34997			000	- - U	J 1	-07		888										
			S	T D	1400)	0400	3500	27	80	000	439	3 1	333	14	901										
			0B 0B		1400		0400 0397	34995 34993								901										
			V 0	J	1400	,	0391	フサブブラ	4 1	0.1					14	400										

REFERENCE	SHIP	LATITU	DE .	ONGITUDE H	MARSDEN	STATION TIL		EAR		RIGINA		\Box	DEPT	. DEF	TH! OR	WAVE SERVATIONS	WEA-	CLOUD		,	NODC
CODE NO.	CODE	· LA III U	1/10	ONGITUDE NO	1	MO DAY HE			CRUISE NO.	N L	ATION		вотто	3 C	F	HGT FER SEA	CODE	TTPE AM		N	UMBER
31800	7 EV	4005	N C	6356 W	151 03	11 02 1	61 1	966		050	1		475	5 1	15 13	3 2	x 2	0 3			0063
					WAT		IN D SPEED	BARO	. —	IR TEM		vis.	NO. 085		PECIAL						
					COLOR	TRANS. DIR.	OR FORCE	METER (mbal		RY ILB	BULB	CODE	DEPT		RVATIONS						
					DT	SD 14	522	32.	2 1	84	142	7	3.8	3							
	MESSENGE	CAST	CARD		1 %	5 %.	SIGMA		SPECIFIC	VOLUM	£ \$	A. D.	5	SOUND	02 ml/	PO ₄ -P	TOTAL-P	NO2~N	NO3-N	SI O4-Si	
	TIME HR 1/10	♀ NO.	TYPE	DEPTH (m)	, ,	,	SIGMA		ANOMA	LT-#10 ⁷	X	103	. ^	ELOCITY	02 1117	уд - a1/1	µg - a1/1	µg = a1/l	yg - al/l	yg - a1/l	pН
			-																		
	'	1	STE	0000	1440 1440	3315 33147	246		003	2586	0	000		503 503							
	16	1	085 ST		1581	3363	247		003	2027	0	032		15084							
			085	0010	1581	33627	247	6					1	15084	+						
	20	2	510	0020	1653 1653	3407 34067	249		003	0412	. 0	064		511: 511:							
	0.0	2	085 085	0025	1675	34130	249	-						512							
			STO	0030	1696	3424	249		0030	0170	0	094		513(
			OBS	0030	1696	34236	249							15130							
			085 085	0040 0049	1763 1174	34587 33806	250 257							15150 14959							
			510		1282	3423	258		002	1717	0	146		500							
			085	0050	1282	34227	258							1500							
			085 085	0052 0056	1000 1273	33627 34516	259 260							L489! L500:							
			085	0063	1214	34314	260							1498							
			OBS	0065	1249	34546	261							1499							
			STI	0075	1003	3424 34239	263		001	6775	0	194		L490' L490'							
			085 085	0085	1270	35107	263 265							1501							
			STO	0100	1350	3547	266	7	001	4077	0	232	1	1504	3						
			085	0100	1350	35467	266							15048							
			085 085	0105 0110	1324 1357	35427 35587	266 267							l 5031 l 5051							
			\$ T (1276	3545	268		001	2853	0	266		502							
			085	0125	1276	35447	268							1502							
			STO OBS	0150	1210	3543 35432	269 269		001	1784	0	497		15001 15001							
			OBS	0171	1121	35287	269							1497							
			STO		1071	3529	270		001	0467	0	352	1	1496	5						
			085 510	0200	1071 0979	35288 3523	270		000	06.6	0	/. o a		L4960 L4940							
			085	0271	0919	35168	272		000	9446	, 0	402		1494) 1492)							
			ST	0300	0812	3505	273	1	000	8276	0	447	1	488	+						
			OBS STÎ	0300	0812 0613	35045 3496	273		000	4 2 0 1	_	510		488							
			085	0400	0613	34957	275		000	6291	. 0	519		482							
			085	0428	0562	34926	275	6					1	480	5						
			085	0440	0570	34962	275		000	6 n c n				1481							
			5 T (0500 0500	0539 0539	3499 34987	276 276		000	5252	. 0	577		L4801 L4801							
			STO	0600	0492	3501	277	1	000	4648	9 0	627	1	1480	0						
			085	0600	0492	35006	277							1480							
			0BS 5T(0695 0700	0471 0444	35007 3496	277		000	4532	2 0	673		L481: L480:							
			085	0700	0444	34958	277					- , -		1480							
			510		0440	3500	277		000	4254	+ 0	716		481							
			OBS STI	0800	0440 0427	35003 3500	277		000	4242	2 0	759		1481 1482							
			085		0427	34997	277		000		. 0	. , , ,		1482							
			\$10	1000	0415	3500	277	9	000	4200	0	801	. 1	14841							
			085 510		0415 0405	34996 3499			000	4202	, ^	B/ ~		1484							
			085	1100	0405	3499	278 278		000	4 ∠U∠	. 0	843		L485 L485							
			ST	1200	0393	3498	278	0	000	4225	0	885	1	486	+						
			085		0393	34981	278		000	. 7 - "	, ,	030		486							
			\$10 QBS		0384	3497 34972	278 278		000	4267	. 0	928		L487 L487							
			STO	1400	0379	3498	278		000	4232	. 0	970		489							
			085	1400	0379	34980								489							
			\$ † [0 B S		0377	3499	278		000	4205	1	012		4908							
			005	1500	0377	34992	278	د،					1	14901	,						

	SHIP	LATITU	DE LC	NOITUDE PARTIE	MARSDEN SOUARE	STATION T		YEAR C	ORIG RUISE NO.	STAT NUA	ION	DEP1 TO SOIT	OEFI	085	WAVE ERVATIONS	WEA- THER CODE	CLOUD COOES		S	NODC TATION LUMBER
7	EV	4023		6418 W	151 04			966		51	100.1	457	3 MFL	+	3 3	X2			-	
' '	1	.023	0	3 · 1 · 3 · 1 · 1	WAI		VIND			EMP.	l		-1-	1 14	12/2/	1 ^2	013	ł		0064
					COLOR		SPEED	BARO- METER	DRY	_	VIS.	NO.		CIAL VATIONS						
					COOL	TRANS. DIR.	OR FORCE	[mbs]	BULB		JLB COO	DEPT	HS OBSEK	YA IIONS						
					DT	SD 15	520	295	206	1	61 7	34	+							
1	MESSENGR TIME (TZAO	CARD		T	1	T	Ή,	SECIEIC VO	11145	ΣΔD	٦,	SOUND		PO4-P	TOTAL-P	NO2-N	NO3-N	SI O4-SI	
	TIME (NO.	TYPE	DEPTH (m)	1 °C	s ·4.	SIGM	A-T 1	PECIFIC VO ANOMALY-	x107	₹ △ D DYN, M x 10 ³	· v	ELOCITY	02 ml/l	νg - α1/1	ا/اه - وبر	μg - σt/l	νg - σt/l	yg = ot/l	рΗ
ŀ	HK 1710	1			+		+				1 10	+			1					
-		1 1	STD	0000	1570	3367	248	. 1	00314	85	0000	, ,	15080							1
	192	2	085	0000	1570	33665	248		0051	0 -	0000		15080							
			STD	0010	1570	3367	248		00315	14	0031		15081							
			OBS	0010	1570	33665	248	1]	15081							
	002	2	OBS	0014	1570	33665	248	1]	15082							
			SID	0020	1625	3393	248		00307	96	0063		5103							
			085	0020	1625	33930	248						15103							
			OBS	0025	1650	34080	249	-		2.0	00.00		5113							
			51D 085	0030	1660 1660	3411 34105	249 249		00303	20	0093	, 1	5118							
			085	0040	1660	34105	249						5118							
			0B5	0045	1420	33955	253						15043							
			OBS	0048	1420	34455	257						5049							
			STD	0050	1480	3496	260	0	00203	12	0144		5075							
			OBS	0050	1480	34955	260					1	5075							
			OBS	0052	1490	34940	259						5078							
			085	0054	1445	34845	259						5063							
			OBS OBS	0058 0064	1475 1385	35150 34955	261 262						5077 5047							
			OBS	0066	1290	34870	263						5015							
			STD	0075	1270	3504	265		00156	26	0189		5011							
			OBS	0075	1270	35035	265		00170	20	010.		5011							
			STD	0100	1245	3535	267		00129	0.9	0224		5011							
			OBS	0100	1245	35350	267	9				1	5011							
			SID	0125	1172	3 537	269		00114	84	0255		4990							
			OBS	0125	1172	35369	269						14990							
			STD	0150	1108	3531	270		00138	55	0283		14971							
			OBS	0150	1108	35307	270						4971							
			STD OBS	0200	09 7 9 0979	3518 35175	271 271		00097	43	0334		4931							
			STD	0250	0883	35175	272		00088	4 1	0381		14931 14903							
			510	0300	0780	3504	273		00078		0423		4871							
			085	0300	0780	35042	273				0 23		4871							
			085	0350	0670	34992	274					1	4836							
			STO	0400	0611	3498	275		00061	17	0492	1	4821							
			OB5	0400	0611	34977	275						4821							
			STD	0500	0525	3499	276		00050	84	0548		.4803							
			OBS	0500	0525	34986	276		000/5	0.0	011.0		4803							
			STD OBS	0600 0600	0480	3499 34994	277 277		00045	90	0531		4801							
			510	0700	0459	3500	277		00044	00	004.		4801 14809							
			OBS	0700	0459	34999	277		00044	Jy	0042		14809							
			STD	0800	0439	3500	277		00042	64	0689		4817							
			OBS	0800	0439	35000	277		- 0 0 . 2		5-5.		4817							
			STD	0930	0430	3501	277	8	00042	05	0727	7 1	4830							
			085	0900	0430	35007	277						4830							
			STD	1000	0415	3500	277		00041	93	0769		4840							
			085 STD	1000 1100	0415 0434	34997 3500	277		12004.1	4 7	2612		14840							
			0B5	1100	0404	3500	278 278		00041	0 /	3811		4852							
			STD	1200	0396	3499	278		00041	7.6	J d 5 3		4852							
			085	1200	0396	34993	278		00041	1 4	0000		14866							
			SID	1300	0390	3500	278		00041	0.0	0895		4880							
			085	1300	0390	34997	278		_ 0 0 . 1		/-		4880							
			STD	1400	0384	3499	278		00041	94	0936		14894							
			OBS	1400	0384	34494	278					1	14894							
			STD	1500	0380	3500	278		00042	14	0978		4909							
			OBS	1500	0380	34990	278	3				1	L4909							

REFERENCE CTRY 10.	SHIP	LATITUI	DE	LONGITUDE	DCTR	M A R SI SOU A			IDN TI		YEAR	ORIG CRUISE	DTANI			OEPTH TO	MAX. DEPTH		WAVE RVATIONS	WEA- THER	CLOUD		l s	100C
DODE NO.	0000	•	1/10	1/10	ع ا	10*	1.	MO	DAY H	R.1/10		NO.	NUN	BER	Į.	MOTTOM	S'MPL"	S DIR.	HIGT PER SE	CODE	TYPE AM	1	N	UMBER
318007	ΕV	4023	N	06418 ¥	1	151	04	11	02.	205 1	966		51		7	4573	34	14	3 3	X 2	7 8			0065
						ſ	WA.	ER	٧	VINO	BARG	A IR	TEMP.	℃		NO.		CIAL						
							COLOR	TRANS.	DIR.	SPEED OR FORCE	METE (mbs	R DRY		ET JLB	CODE	OBS. DEPTHS		ATIONS						
									15	520	29	5 206	1	61	7	07								
	MESSENGR TIME C	CAST	CAR		lm 1	f	τ	s	٠/	SIGM	A - T	SPECIFIC VO		DY	△ 0 N. M. 10 ³	SOL	IND	02 ml/l	PO4-P	FOTAL-P	NO2-N ug - al/1	NO3-N	\$1 O4-Si	рН
	HR 1/10					-				+				-	. 10	-	-		+					
	20.	ļ [0.0		1 1	١,		1 22	. 30	1				l										ŀ
	209)	089				567	33	670	248	320													
	2		Si				625																	
	209		083				676		130								122							
	205		083	_			377		956								907							
			Si	rD 175	0	0:	362	34	95	278	31	00045	22			14	943							
			51	ID 206		U :	345	34	95	278	3.2	00044	87			14	978							
	205	5	043	5 7213	31	0	336	34	947	278	3.3					14	997							
			51	rD 250) Ü	0	306	34	94	278	35	00043	64			15	047							
	209	5	083	T 26	71	0.	292	34	930	278	36					15	070							
			S1	ID 300	0 (0;	264	34	91	278	3 7	00042	6.2			15	115							
	205	5	089	3 2 9	Ü		245		899	278	3.8						157							
	205		089				239		899	278							174							

acceptuce						1									MA)				1.					1
REFERENCE CTRY I ID.	SHIP	LATITU	DE	LONGITUDE	M AR	SDEN	STATION TO	WE	YEAR	CRUISE	RIGINA	ATION	-	DEPTH	DEPT		WAVE ERVATIONS	WE	R COI			57	ATION	ĺ
CODE NO.	COOE	•	1/10	1/10	10"	+ +	MO DAY H	R.1/10		NO.		UMBER	_	BOTTOM	S*M.PL	*S DIR.	HGT PER SE	CO.	11772			N.	JAMBER	
31 8007	EV	4041	. N	06435 W	151	_		232	1966	ليبا	052			4389	15	12	6 4	X	4 0	3			0066	l
						COLOR		/IN D	BARC		IR TEM	VP. °C	VIS.	NO. OBS.	SP	ECIAL								
						COOF	TRANS. DIR.	FORC	E (mbs		JLB	BULB	CODE	DEPTHS	OBSER	VATIONS								
						DI	SD 15	521	0 28	1 2	06	167	7	28										
	MESSENGR TIME o	CAST	CAR	DEPTH (m)	Τ,	*c	s ·/	510	MA-I	SPECIFIC	VOLUM	AE S	△ D.		JND	O 2 m1/l	PO4-P	TOTAL		N N	103-N	5104-51	- 11	5
	HR 1/10	" no.	TYPE	E DETTIT 11.117				310	/M.A-1	ANOM	ALY-X10	,	103	VELO	CITY	02 11171	μg • αt/l	yg - 01	/I µg - 0	1/I µ	g - al/l	µg • a1/i	рН	Ċ
								-																11
	232	,	51 085			1870 1870	3476 34755		493 493	003	034.	2 0	000		182									
	232	•	51			870	3475		492	003	044	9 0	030		182									
			089			870	34745		492						184									
			\$1			870	3475	_	492	003	048	2 0	U61		185									
	002	2	0B9			.870 .870	34745 34745		492 492						185									
			51			870	3475		492	003	0516	6 O	091		186 187									
			085			.87u	34745		492	00-					187									
			OBS			.87U	34745		492						189									
			51 0B5			.420 .420	3491 34905		609 609	001	9441	8 0	141		055									
			0B3			280	35315		670						017									
			51			285	3533		570	001	3748	8 0	183		020									
			OBS			285	35330		670						020									
			085			275	35335		672	0.01	2014		2 2 4		018									
			51 0B5			220	3529 35285		579 579	001	2919	9 0	216		002									
			51			135	3537		702	001	0825	5 0	246		977									
			OBS			135	35368		702						977									
			51			078	3530		707	001	0368	8 0	272		960									
			OBS			078	35302		707	0.04	1	0 0	421		960									
			51 0B5			940	3517 35167		720 720	000	9168	8 0	321		917									
			51			784	3506		737	000	7661	0 0	363		865									
			51			670	3501		749	000	6539	9 0	399		828									
			OBS			670	35006		749						828									
			S1 0B3			570 570	3502 35022		763 763	000	525.	3 ()	458		805									
			083			1496	34948		766						782									
			51			482	3500		772	000	4471	8 0	506		785									
			OBS			482	34997		772						785									
			S1			1470	3500		773	000	442	5 Q	551		797									
			0B3)470)447	35000 3501		773 776	gan	420	5 ∩	594		797									
			085)447	35007		776	000		- 0	- , 4		804									
			51	D 0800	(426	3500	2	778	000	411	5 0	636	14	812									
			089			426	34999		778	0.00	, 1.0				812									
			51 0B5)417)417	3500 34997		779 779	000	412	0	677		824									
			51			398	34997		779	000	4118	8 O	718		833									
			OBS	1000	(398	34979	2	779					14	833									
			S1			397	3499		780	000	410.	2 0	759		849									
			OB 5			397 380	34992 3498		780 781	000	407	, ^	800		849									
			089			380	34980		781 781	000	407	. 0	000		859 859									
			51	rD 1300		380	3498		781	000	415	1 0	841		876									
			085			380	34981		781						87ь									
			\$1 OB			372	3498		782	000	412	g 0	¢82		889									
			OB5			1372 1370	34982 3499		782 783	000	415	1 0	924		905									
			OBS			370	34987		783	500		- 0			905									

REFERE		SHIP	LATITU	DE	LONG	SITUOE	DRIFT	MARSDEN SQUARE	STATION TI	W.E	YEAR	CRUIS	-	ATOR'S		OEPTH TO	MAX. DEPTH	085	WAVE SERVATIONS	WEA- THER	CLOUD			NOO)N
CODE	ID. NO.	COOE	*	1/10		1/10	180 N		MD DAY H			NO.		NUMBER		BOTTOM	OF S'MPL'S		HGT PER SE	6000	TYPE AM			NUMB	ER
318	1007	Ev	4101	N	064	+53 W		151 14	11 03 0	30]	966		0.5	3		3612	15	15	5 3	x 2	013		1	00	67
								WAT	ER W	INO.	BARC		AIR TE		VIS	NO.	SPEC	IAL							
								COLOR	TRANS. OIR.	SPEED OR FORCE	METE (mbs		ORY	W É T BULB	CODE	OBS. DEPTHS	OBSERVA	TIONS							
								DT	50 12	522	27	_	167	150	7	37									
	ſ	MESSENCE								Τ				5					100 0			110 11	610		
		MESSENGR TIME		CAR	Ĕ	DEPTH 6	m)	1 °C	s ./	SIGM	A-T	ANO	MALY-X	(a) 0	∆ 0 yn, M x 10 ³	. VELO	DCITY	O 2 ml/l	PO4-P pg = 01/1	FOTAL-P pg - at/1	NO2-N µg + al/l	NO3-N ug + o1/1	21 O 1-		РН
	ŀ	HR 1/10			\rightarrow									\dashv		+			+ +					+	
	ı		1 1	51	то	000)	1214	3204	242	9 '	00	3647	76 ° C	000	14	942		1 ,	,	'		'	'	'
		0.36)	089		0000		1214	32035	242		0.0	0/				942								
				S1 089		001		1215 1215	3204 32035	242		00	3651	.6 (036		944								
				51		002		1217	3204	242		00	3657	3 (073		947								
		00	2	0B5	5	0021		1217	32035	242							947								
				089		002		1110	32090	245		0.0	3010		100		911								
				S1 089		0031		0918 0918	3237 32370	250		00	2919	75 (106		845 845								
				QB 5		004		0426	33255	264							664								
				S 1	TD	005	O	0463	3345	265	51	00	1535	55 (150	14	682								
				089		005		0463	33450	265							682								
				0B3		006		0420 0480	33650 3392	261		0.0	1207	70 0	185		669 700								
				OB 9		007		0480	33915	268		00	1201		100		700								
				089	5	007		0494	33945	268	37						707								
				089		008		0454	33805	268		0.0	1.1.0.1		. 7 1 /		689								
				0B	T 0	010		0460 0460	3403 34030	269		00	1101	19 (214		697 697								
				51		012		0598	3445	27		υO	0952	28 0	239		763								
				085	5	012		0598	34445	273						14	763								
				OB:		013		0668	34675	272							796								
				S1 089		015		0650 0650	3463 34627	272		00	0886	3 (262		790 790								
				OBS		016		0500	34487	272							731								
				089		018		0481	34539	273							727								
				S1 QB3		020		0507	3463	273		00	0718	30 0	302		741								
				083		020		0507 0541	34627 34746	273							741 757								
				0B3		021		0519	34648	274							748								
				OBS		023		0567	34827	274							773								
				\$1		025		0586	3484	274		00	0661	.4 (337		784								
				0B9		025		0588 0555	34840 34824	274							785 773								
				089		027		0555	34877	275							775								
					TΟ	030		0551	3488	279		00	0594	7 0	368	14	779								
				0B5		030		0551	34879	279		0.0	0520	10 0	4.3.		779								
				0B5	TD S	040		0518 0518	3494 34942	276		UÜ	0520	12 L	424		783 783								
					T D	050		0459	3495	277		00	0459	2 0	473		775								
				08		050		0459	34945	27							775								
				S1 0B5	T D	060		0434	3495 34947	271		00	0439	1 (518		781								
					o TD	070		0434	3497	27		00	0431	. 0 . 0	261		781 797								
				OB:		070	Ü	0431	34967	27				- '			797								
					TO	080		0414	3498	277		00	0414	2 0	004		806								
				OB S	S TD	080		0414 0400	34976 3497	277		0.0	0412	,, ,	045		806 817								
				OBS		090		0400	34969	271		00	0412	د ر	547		817								
				S	TΟ	100	0	U399	3498	277	79	00	C415	2 (086		833								
				0B5		100		0399	34976	277		0.0			7.		833								
				OB:	10 S	110		0384 0384	3497 34967	278 278		00	0412	. / C	728		844 844								
					τD	120		0380	3497	278		00	0415	9 (769		859								
				083	S	120	Ü	0380	34968	278	3 0					14	859								
				\$1		130		0375	3497	278		00	0416	9 (811		873								
				089 S1		130		0375 0370	34970 3498	278		0.0	0414		852		873 888								
				0B		140		0376	34977	278		UU	0-14		002		888								
				\$1		150		0367	3498	278	32	00	0418	15 0	۵94	14	904								
				089	S	150	Ũ	0367	34977	278	3.2					14	904								

FERENCE	SHIP					± Ĕ	MARSDEN	STATION TI	ME			RIGIN	ATOR'S		OEPTH	MAX		WAVE	WEA-	CLOUD			NODC
ET ID.	CODE	LATITU	1/10	LONG	1/10	DRUFT	SOUARE	(GMT)		YEAR	CRUISE NO.	S	TATION		TO BOTTOM	OF	003	ERVATIONS	THER	COOES			STATION
31800	7 EV	4126		065		\vdash	151 15	11 U3 U	R.1/10	1966	NO.	0.5				2 WLF		HGT PER SEA	`	TYPE A.M.	T		
1000	, -, ,		,,,,	0071	"	1	WA		INO		I A		AP. °C		2633 No.	·		7 2	X2	013	l		0068
							COLOR	TRANS. DIR	SPEED	BARO	R D	RY	WET	CODI	085.	OBSER	ECIAL VATIONS						
							CODE	100.1	FDRC			-	BULS	\perp	DEFINS								
		_					DT	SD 13	520	25	1 1	61	144	1.	34	<u> </u>		1					
	MESSENGR TIME HR 1/10		CAR	D E	DEPTH 6	m)	ī *c	s */	SIG	MA-T	SPECIFIC	VOLU:	M1 0	∆ 0 YN, M X 10 ³	VETO	DOCITY	O2 ml/1	PO4-P +g - at/1	TOTAL-P	NO2+N µg - at/l	NO3-N yg - ai/l	\$1 O4-\$ #9 = 01/	
				то	000		1220	3181		+10	003	824	2 0	000		942							
	06	0	08:	5 TO	000		1220 1121	31810 3181		+10 +28	003	654	4 (037		942							
			0В		001		1121	31810		+28	002	0,74	7 (, ,		908							
		_		TD	002		0880	3186		+72	003	240	5 (072		822							
	00.	2	08:		002		0880 0740	31860 31950		+72						822							
			0B:		003		0721	3206		+99 510	002	874	9 (102		770 765							
			0В:		0030		0721	32060		510	002		_			765							
			S		0050		0509	3249		70	002	304	8 (154		689							
			0B;		005		0509	32490		70	003	- 1 5	1 4			689							
			089	T D 5	007		0228 0228	3300 32995		37	001	008	1 (1204		580 580							
			0В;		008		0215	33015		39						575							
				τD	0100		0377	3383		90	001	168	0 0	239	14	660							
			08		0100		0377	33830		90	001	005				660							
			0B	TD S	012		0439 0439	3403 34025		99 99	001	085	9 (1268		692 692							
			0В:		013		0452	34065		701						699							
			0B		013		0508	34255		710						726							
			S.		0150		0508	3428		711	000	976	5 (293		728							
			0B3		0200		0508 0500	34275 3446		711 727	000	220	5 .	1339		728 736							
			OB:		0200		0500	34455		727	000	0 7 0	, ,	1239		736							
			089		0214	4	0503	34510		731						740							
			OBS		0220		0619	34965		752						794							
			0B3		0250		0560 0560	3484 34843		750 750	0000	626	1 0	1375		774							
			08:		026		0580	34837		747						774 785							
			S		0300		0538	3479		748	000	646	7 0	407		772							
			089		0300		0538	34788		748					14	772							
			08		0310		0520	34886		758						768							
			0B9		0318		0556 0549	34907 34928		756 758						784 787							
			51		0400		0497	3494		65	0004	497.	2 0	464		774							
			089		0400		0497	34939	27	65					14	774							
			51 083		0500		0438	3490		69	0004	466	9 0	513		766							
			51		0500		0438	34902 3494		69 71	0004	454	3 0	559		766 783							
			OBS		0600		0440	34936		71	000.		_ 0	- 27		783							
			SI		0700		0428	3495	27	74	0004	440	1 0	603	14	795							
			089		0700		0428	34950		74	000			. , ¬		795							
			S1 089		0800		0421 0421	3495 34951		75 75	0004	+41	u j	647		809 809							
			Si	r D	0900		0414	3496		76	0004	438	7 0	691		823							
			089		090		0414	34956		76					14	823							
			S1 083		1000		0410	3497		77	0004	4 2 5	3 0	735		888							
			51		1100		0410 0399	34967 3497		77	0004	431	1 0	778		838 850							
			089		1100		Ú399	34967		78	000	1	- 0			850							
			S 1	O	1200	C	0386	3497	27	80	0004	424	1 0	821	14	861							
			089		1200		0386	34967		80						861							
			S1 089		1300		038U 0380	3497 34966		80	0004	426	1 0	064		875 875							
			51		1400		0376	3497		81	0004	429	7 0	906		891							
			OB 5	5	1400	J	0376	34966	27	81					14	891							
			S1		1500		0370	3497		81	0004	429	7 0	949		905							
			033)	1500	J	0370	34967	27	81					14	905							

FERENCE	SHIP	LATITU	DE .	ONGITUDE EX	MARSDEN SQUARE	STATION THE	ME YEAR	ORIGINA			MAX.		WAVE RVATIONS	WEA-	CLOUD			NODC TATION
Y ID.	CDDE	· CAIIII	1/10	ONGITUDE NO.		MO DAY HE			ATION JMBER	BOTTON	MPL'S		GT PER SEA	- cons	TYPE AM			UMBER
1800	7 EV	4152	2 N C	06543 W	151 15	11 03 0	98 1966	055		0667	07	12	7 4	x 2	0 3			006
					WAI	ER W	IND BAR		VIS.	ND.	SPECIA	.L						
					COLDR	TRANS. DIR.	SPEED MET		WET COD	OSS. DI	BSERVAT							
					DT	SD 13	535 21	7 172	161 7	20		_						
	MESSENGR TIME HR 1/10		CARD TYPE	DEPTH (m)	1 °C	s */	SIGMA-T	SPECIFIC VOLUM		. SOUNE		2 ml/l	PO4-P µg = 01/1	101AL-P pg = a1/I	NO2~N µg = at/1	ND3~N µg - 01/l	\$1 04-\$1 yg - 01/1	рН
			ST		0920	3249	2514	0028320	0000									
	09	8	OBS	0000	0920	32485	2514			1484								
			STO		0919	3249	2514	0028322	0028									
			055 STI	0010	0919 0917	32485 3249	2514 2515	00.19300	005	1484 1484								
	00	3	085	0020	0917	32485	2515	0028309	0057	1484								
	00	1	085	0025	0880	32535	2524			1483								
			STO		0840	3255	2532	0026716	0084									
			085	0030	0840	32550	2532	0020710	0000	1481								
			STO		0632	3309	2603	0019965	0131									
			085	005Û	0632	33090	2603			1474								
			STO	0075	0575	3341	2635	0016958	0177									
			OBS	0075	0575	33405	2635			147.	32							
			085	0095	0573	33005	2651			147	57							
			STO		0549	3367	2658	0014740	0417	1472	29							
			OBS	0100	0549	33665	2658			147								
			OBS	0111	0477	33740	2673			1470								
			STE		0483	3378	2675	0013133	0451									
			OBS	0125	0480	33780	2675			1470								
			0B5	0130	0478	33780	2676			1470								
			OBS	0131	0500 0503	33860 3387	2679 2679	0012776	0.797	1471								
			085	0150	0503	33865	2679	0012776	0284									
			STO		0499	3415	2702	0010660	0342	1472								
			085	0200	0499	34149	2702	0010000	0.742	1473								
			STO		0501	3441	2723	0008789	0391									
			STO		0503	3460	2737	0007474										
			OBS	0300	0503	34597	2737	500.715	0.52	1479								
			STO		0460	3477	2756	0005813	0498									
			OBS	0400	0460	34768	2756			1479								
			ST		0447	3484	2763	0005219	0553	1476	68							
			OBS	0500	0447	34842	2763			1476	68							
			STO		0448	3485	2763	0005298	0606	1478	86							
			OBS	0600	0448	34847	2763			1478	86							
			OBS	0660	0445	34867	2765			1479	94							

								-		-	. , ,	•	•••			- Cu											
EFERENCE IN IO.	SHIP	LATITU	1	DINGITUOE E	MAR!			ION TI		YEAR	CRUI		STATI	ON	-	DEPTH TO BOTTOM	DEPT OF	H OB	SERV	A VE		WEA- THER CODE		LOUD			NOOC STATION NUMBER
DE NO.	1		1/10	1710	10	1,	MO	-	_		NO	+	NUM	ER	-		S'MPI		+-	T PER	5EA	CODE	111	MA I	1		MUMBER
31 800	7 EV	4217	8N 0	65580W	151	25	11	03	131	1966	<u> </u>	05	6			0225	0.	2 15	7	3		X2	1	0 3			0070
						WA	ER	٧	VINO	BAR		AIR TEA	MP.		VIS.	NO.	SF	ECIAL									
						COLOR	TRANS.	DIR.	SPEED OR FORCE	M ET		DRY BULB	8U	T c	ODE	OBS. DEPTHS		VATIONS									
						DT	SD	13	540	19	90	139	1.	28	8	23											
	MESSENGE TIME HR 1/10	P NO.	CARO TYPE	OEPTH (m)	τ	℃	s	٠/	SIGA	1-AA		FIC VOLU		₹ Z OYN x	103 103	VEFC SO fi		02 ml/		PO 4~1		10TAL-P ug = 01/1		02-N - 01/1	NO3-N µg - a1/l	\$1 O4-5	
		1			7																T						i
		-	STD	0000	0	891	32		2.5	01	0.0	2960) 5 '	00	00	14	828		,		,					•	
	13	1	OBS	0000	0	891		254	25	01						14	828										
			STD	0010		89Ū	32		25		0.0	2960	7	00	30		829										
			OBS_	0010		890		254	25								829										
	0 -		STD	0020		885	32			0.2	0.0	12955	0	00	59		829										
	00	0	085	0020		885		254	25								829										
			085	0025		884		254	25		0.0	2010		0.0			830										
			STD OBS	0030		880	32	254	25 25		00	2949	13	00	89		829										
			085	0030		693		130	25								829 756										
			085	0046		660		360	25								748										
			SID	0050		547		53		69	20	2316	. 2	01	7. 1		705										
			OBS	0050		547	_	530	25		0.0	2310	, ,	0 1	41		705										
			OBS	0066		458		875	26								675										
			OBS	0070		400		045	26								654										
			STD	0075		399	33		26		0.0	1710	0.0	01	92		655										
			OBS	0075		399		135	26								655										
			OBS	0080		395		150	26								655										
			OBS	0082	0	368	33	255	26								645										
			OBS	0086	0	371	33	390	26	56						14	649										
			OBS	0094	0	420	33	695	26	75						14	675										
			SID	0100	0	422	33	78		82	0.0	1248	35	02	29	14	678										
			085	0100		422		782	26	8.2						14	678										
			OBS	0108		423		831	26							14	680										
			OBS	0110		459		964	26								697										
			OBS	0118		500		109	26								718										
			STD	0125		501	-	13	27		0.0	1072	8 2	02	58		720										
			OBS	0125		501		132	27								720										
			OBS	0129		502		167		03							721										
			STD	0150		585		45		16	0.0	0937	79	02	83		762										
			OBS	0150		585		448		16	0.7	10777		0.3			762										
			STD	0200		562	_	78		44	00	10672	6	Ų 3	23		765										
			OBS	0200	U	562	34	775	27	44						14	765										

REFERENCE CTRY IO.	CODE	LATITU	DE 1/10	FONGITUDE PAGE	MARS SQU	OEN ARE		ION T		YEAR	c		ATOS ITATI) N	_	DEPTH TO OTTOM	MAX. DEPTH OF S'MPL'S		WAVE SERVATIONS	WEA- THER CODE	COOES			NODC STATION NUMBER
31800	7 EV	4700		048000W	149	78	11		161	196	6	0.5		-	10	146	01	00	2 2	X6		+		0071
,,	1 1				-	WA	TER	T-\	MIND		-1-	A ID TE		:]	+	NO.			1-1-1	1	1 013	'	- 1	001.
						COLOR	TRANS	DIR.	SPEED OR FORC	WE	RO- TER bs)	DRY	W BU		000	OBS. SEPTHS	OBSERV							
						DT	SD	05	+		54	067	0	57 5	,	14								
	MESSENG TIME HR 1/10	NO.	CAR		T	°c	1	٠/	T-	MA-T	s	PECIFIC VOLU	ME	₹ △ DYN. x 10	о м.	SOU		O2 ml/	PO4=P µg = 01/I	101A L=P #g = a1/1		NO3-N yg - al/l	SI O4-5	
							1		1							1								
	1.6		S1			572		40		556		002437	5	000	0		705							
	16	1	089 S1			572 562		399 43		556		002407	1	002	٠.		705 703							
			0B5			562		426		559		002407	1	002	. 4		703							
			S1			562		43		559		002408	1	004	. 8		705							
	0.0	0	083			562		426		559		002 100	-	00,			705							
		•	089	-		528		611		577							694							
			Si	0 0030	0	529	32	70	2 9	584		002168	5	007	7 1	14	696							
			OB5	0030	0	529	3.2	698	2 5	584						14	696							
			OBS	0037	0	294	32	446	2 5	588						14	595							
			OBS	0039	Ü	351	32	986	26	526						14	627							
			083	0043	Ú	116	3.2	820	26	531						14	523							
			085	0044	0	153	33	028	26	545						14	542							
			S1	D 0050	-0	010	3.3	15	26	564		001404	5	010	7	14	471							
			OBS	0050	-0	010	33	152	26	664						14	471							
			083	0054	-0	040	33	334	26	580						14	460							
			S1	rD 0075	0	000	33	50	26	592		001145	3	013	39	14	484							
			085			000		497		592						14	484							
			S1			050		81		714		000935	6	016	5		516							
			OBS			050		806		714							516							
			0B	0120	0	093	33	883	2.	717						14	539							

REFERENCE CTBY IO. CODE NO.	CODE	LATITUI	DE L	ONGITUDE LA STATE	MARSE SQUA	RE	STATION (GM			EAR	CRUISE NO.	S	ATOR'S		OEPTH TO BOTTO	ם	MAX, EPTH OF MPL'S	O85	WAV SERVA	E TIONS PER SE	WEA THER	CODE	s]		STA	OC TION MBER
318007	EV	4700	ON C	47440W	149	77	11 06	177	1	966		05	8		017	5	01	00	3	2	Х6	0			Λ	072
	, ,		,		ď	WAT	ER	WINO	1	BARC		AIR TE		\top	NO.	Τ΄			1 - 1	- 1	1	, ,,,	,	'	•	0 , 21
						CODE	TRANS. DE		ED R PCE	M ETE (mbs	R	ORY .	W E T SULB	C02	0.00	S OB	SPEC SERVA									
						DT	SD 0	5 S 2	20	15	9 ()67	06	7 5	17											
	MESSENGA TIME O HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	т	°c	s *4.	. s	IGMA	1-1		VOLU	07	E △ D YN. M X 10 ³		DUNE) 2 ml/l		- 01/1	101AL-1		NO3-1			рН
																			\top							
	1	' '	ST	0000	0 9	550	3257	1 2	257	1 '	00.	288	4 (0000) 1	469	98		1	1		1	1	1	'	
	177	,	OBS	0000	0 9	550	3256	5 2	257	1					1	469	9.8									
			STO	0010	0 9	545	3256	2	257	2	002	2287	6 (0023	3 1	469	98									
			085	0013	0 9	545	3256	0 2	257	2					1	469	9.8									
			STI	0020	0 5	523	3256	2	257	4	00	2268	3 (0046	5 1	469	90									
	000)	OBS	0020		523	3255		257	4					1	465	90									
			085	0025		527	3262		157						1	469	4									
			ST			524	3262		257		002	2225	3 (0068	3 1	469	93									
			OBS	0030		524	3261		257							469										
			OBS	0034		505	3270		258							468										
			OBS	0041		241	3263		260							457										
			OBS	0043		303	3295		262							460										
			OBS	0046		99	3257		261				_			451										
			STO		-00		3281		263		00.	1660	2 (0107		445	_									
			OBS OBS	0050 0052	-00		3280	-	263							445										
			085	0054	-00 -00		3306 3344		265							445										
			0B5	0059	-00		3330		268							447										
			ST		-00		3350		267 269		00	1138	ο.	5.1.6		445										
			085	0075	-00		3349		269 269		00.	1108	0 1	3142												
			ST			040	3372		269 270		00:	995	5 (0169		447										
			OBS	0100		140	3372		270		000	, , ,)		10;		451 451										
			ST			103	3387		271		000	918	9 1	0193		454										
			OBS	0125		103	3387		271		000	0	' '	• • / .		454										
			STO			198	3415		273		0.00	778	2 1	214		459										
			085	0150		198	3414		273		500	,		/ L 1 -		459										

187 187																						
No. No.	REFERENCE	SHIP			= 5	MARSD	EN	STATIO	N TIME		ORIGINATOR'S		i*s									
															OF			CODE	ł			
MISSINGE CARD CAR		7 5 1	4700								-	_		2.4					1	,		0073
MISSINGS CAST CARD DEPIN (m) T C S '4. SIGMA S	3 1000	1 -0 1	4100	/014	04/3104	147					A ID TE			-	υz	00	12151	1 40	1 013	1		0013
MISSINGS CAST CARD TYPE DEPTH (m) T \(\times \) S \(\times						-	_		SPEE	DMETE	,-		VIS.	OBS.								
MISSINGE CAST CAND TITE DIPTH (m) 1 °C 5 °A. SIGMA-T MISSINGAL SLO N SUND DIPTH (m) 1 °C 5 °A. SIGMA-T MISSINGAL SLO N DIPTH (m) 1 °C 5 °A. SIGMA-T MISSINGAL SLO N DIPTH (m) DIPTH (m) 1 °C S °A. SIGMA-T MISSINGAL SLO N DIPTH (m) DIPTH (m) TITE SIGMA-T MISSINGAL SLO N DIPTH (m) D														DEPTHS	OBSEKV.	AIIUNS						
No. No.							ÐΤ	50 (05 53	5 26	1 067	0	67 5	20								
No. No.		MISSENCE	1			<u> </u>			1				≯ ∧ D	T			T			110	510 6	
STD		11861	ÇAST			1 .	C	s */	sic	T-AME			DYN. M.			0 2 ml/l						pН
187		HR 1/10		-		-		-	_		-		X 10-	-	-		+				-	
187			1		-0000	0.5	, 2	224	,	ا ر	002363	ا ر	0000	17.7	. 04		1		ļ	ļ	i	l
STD OO10 O513 3244 2565 OO23468 OO24 14683 OBS OC10 O513 32435 2565 OC21651 OJ46 14697 OO0 OBS OO20 O535 32710 2585 OC21651 OJ46 14697 OO0 OBS OO20 O535 32710 2585 OC21651 OJ46 14697 OOS OO25 O533 32725 2586 OC21651 OJ46 14698 STD OO30 O518 3276 2590 OO21137 OU67 14693 OBS OO30 O518 32755 2590 OC21137 OU67 14693 OBS OO33 OS08 32805 2595 OC21651 OU67 OC217 OBS OO30 OC518 32725 2597 OC217 OC217 OC217 OBS OO40 O400 OC270 OC217 OC217 OC217 OC217 OBS OO40 O400 OC217 OC217 OC217 OC217 OBS OO40 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC217 OC2		1.8	7								002302		0000									
OBS		10	,					_	_	-	002346	.8	0024									
STO 0020 0535 3271 2585 0021651 0046 14697											302340		7-1-									
000 085 0020 0535 32710 2585 14697 085 0025 0533 32725 2586											002165	1	0946									
STD 0030 0518 3276 2590 0021137 0067 14693 0BS 0030 0518 32755 2590 14693 14693 0BS 0033 0508 32805 2595 14656 0BS 0040 0400 33045 2626 14649 0BS 0042 0306 32970 2628 14649 0BS 0050 0056 3301 2649 0015491 0104 14499 0BS 0050 0056 33005 2649 14499 14499 0BS 0050 0056 33005 2649 14499 0BS 0062 0059 33760 2710 14513 0BS 0062 0059 33760 2710 14505 STD 0075 0075 33865 2716 0009128 0135 14524 OBS 0100 0132 33985 2723 0008502 0157 14555 <td></td> <td>0.00</td> <td>О</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		0.00	О																			
085 0030 0518 32755 2590 14693 085 0033 0508 32805 2595 14690 085 0035 0430 32725 2597 14656 085 0040 0440 33045 2626 14649 085 0042 0306 32970 2628 14608 5TD 0050 0056 3301 2649 0015491 0104 14499 085 0058 0058 0040 33520 2691 14590 085 0058 0058 0040 33520 2691 14590 085 0058 0058 0040 33520 2691 14513 085 0055 0045 3305 2710 14513 085 0055 0045 3305 2710 14513 085 0055 0045 3365 2716 14505 085 0100 0132 33985 2723 0008502 0157 14555 085 0110 0132 33998 2723 0008502 0157 14555 085 0110 0163 34105 2730 14594 570 0125 0224 34255 2738 14594 570 0150 0273 3438 2744 0006622 0194 14631 085 0150 0273 3438 2744 0006622 0194 14631 085 0150 0273 3438 2744 0006622 0194 14631 570 0200 0293 3448 2744 0006622 0194 14631 570 0200 0293 3448 2744 0006622 0194 14631 570 0200 0293 3448 2747 0006342 0226 14668				089	5 0025	05	33	327	25 2	586				146	598							
085 0033 0508 32805 2595 14690 085 0035 0430 32725 2597 14656 085 0040 0440 33045 2626 14649 085 0042 0306 32970 2628 14608 5TD 0050 0056 3301 2649 0015491 0104 14499 085 0058 0040 33520 2691 14500 085 0058 0040 33520 2691 14500 085 0058 0040 33520 2691 14513 085 0065 0040 33750 2710 14513 085 0065 0040 33750 2710 14513 085 0075 0075 3386 2716 009128 0135 14524 085 0075 0075 3386 2716 14524 5TD 0100 0132 3399 2723 0008502 0157 14555 085 0110 0163 34105 2730 14552 085 0110 0163 34105 2730 14572 085 0112 0209 34205 2735 14594 5TD 0105 0224 3426 2738 0007144 0176 14604 085 0125 0224 3426 2738 0007144 0176 14604 5TD 0150 0273 3438 2744 000662 0194 14631 085 0150 0273 34380 2744 14631 085 0150 0273 34380 2744				S	TD 0030	05	18	327	5 2	590	002113	3.7	0067	146	593							
085 0035 0430 32725 2597 14656 085 0040 0400 33045 2626 14669 085 0042 0306 32970 2628 14608 5TD 0050 0056 3301 2649 0015491 0104 14499 085 0050 0056 33005 2649 14409 085 0058 0040 33520 2691 14500 085 0058 0040 33520 2691 14500 085 0065 0040 33750 2710 14513 085 0065 0040 33750 2710 14505 5TD 0075 0075 3386 2716 0009128 0135 14524 085 0075 0075 33865 2716 14505 085 0100 0132 33985 2723 0008502 0157 14555 085 0100 0132 33985 2723 085 0110 0163 34105 2730 14572 085 0112 0209 34205 2735 14572 085 0125 0224 3426 2738 0007144 0176 14604 085 0125 0224 3426 2738 14604 5TD 0150 0273 3438 2744 000622 0194 14631 085 0150 0273 3438 2744 0006342 0226 14648				08	5 0030									140	693							
OBS					-																	
085 0042 0306 32970 2628 14608 5TD 0050 0056 33U1 2649 0015491 0104 14499 085 0050 0056 33U05 2649 14499 085 0058 0040 33520 2691 14500 085 0062 0059 33760 2710 14513 085 0065 0040 33750 2710 14513 085 0075 0075 3386 2716 009128 0135 14524 085 0075 0075 3386 2716 14524 5TD 0100 0132 33985 2723 0008502 0157 14555 085 0100 0132 33985 2723 14555 085 0110 0163 34105 2730 14572 085 0112 0209 34205 2735 14594 5TD 0105 0224 3426 2738 0007144 0176 14604 085 0125 0224 34255 2738 14604 5TD 0150 0273 3438 2744 0006622 0194 14631 085 0150 0273 34380 2744 14631 5TD 0100 0273 34380 2744 14631 5TD 0100 0273 34380 2744																						
STD 0050 0056 33U1 2649 0015491 0104 14499 0BS 0050 0056 33U05 2649 14499 0BS 0058 0040 33520 2691 14500 0BS 0062 0059 33760 2710 14513 0BS 0065 0040 33750 2710 14505 STD 0075 0386 2716 0009128 0135 14524 0BS 0075 03855 2716 0009128 0135 14524 STD 0100 0132 3399 2723 0008502 0157 14555 0BS 0100 0132 33985 2723 0008502 0157 14572 0BS 0110 0163 34105 2730 14572 14594 STO 0125 0224 34265 2738 0007144 0176 14604 0BS 0125 0224 34265 2738<																						
085 0050 0056 33005 2649 14499 085 0058 0040 33520 2691 14500 085 0062 0059 33760 2710 14513 085 0065 0040 33750 2710 14505 5T0 0075 0075 3386 2716 0009128 0135 14524 085 0075 0075 33855 2716 14524 5TD 0100 0132 3399 2723 0008502 0157 14555 085 0100 0132 33985 2723 14555 085 0110 0163 34105 2730 14572 085 0112 0209 34205 2735 14572 085 0125 0224 3426 2738 0007144 0176 14604 085 0125 0224 34265 2738 14604 5TD 0150 0273 3438 2744 000652 0194 14631 085 0150 0273 34380 2744 5TD 0200 0293 3448 2747 0006342 0226 14648											001640	0.1	010									
085 0058 0040 33520 2691 14500 085 0062 0059 33760 2710 14513 085 0065 0040 33750 2710 14505 5TD 0075 0075 3386 2716 0009128 0135 14524 085 0075 0075 33865 2716 14524 5TD 0100 0132 3399 2723 0008502 0157 14555 085 0100 0132 33995 2723 0008502 0157 14555 085 0110 0163 34105 2730 14572 085 0112 0209 34205 2735 14594 5TO 0125 0224 3426 2738 0007144 0176 14604 085 0125 0224 34255 2738 14604 5TD 0150 0273 3438 2744 000622 0194 14631 085 0150 0273 34380 2744 14631 5TD 0200 0293 34485 2747 0006342 0226 14648											001049	1	0104									
OBS 0062 0059 33760 2710 14513 OBS 0065 0040 33750 2710 14505 STD 0075 0075 33865 2716 009128 0135 14524 OBS 0075 0075 33855 2716 14524 14555 STD 0100 0132 3399 2723 0008502 0157 14555 OBS 0100 0132 33985 2723 14555 14572 OBS 0110 0163 34105 2730 14572 14594 STO 0125 0224 34205 2738 0007144 0176 14604 OBS 0125 0224 34255 2738 14604 14604 STD 0150 0273 34380 2744 000652 0194 14631 OBS 0150 0273 34380 2744 000652 0194 14631 OBS 0150 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																						
OBS 0065 0040 33750 2710 14505 STD 0075 0075 3386 2716 0009128 0135 14524 OBS 0075 03855 2716 14524 14524 STD 0100 0132 3399 2723 0008502 0157 14555 OBS 0110 0163 34105 2730 14572 14572 OBS 0112 0209 34205 2735 14594 14604 STO 0125 0224 3426 2738 0007144 0176 14604 OBS 0125 0224 34255 2738 14604 14604 STD 0150 0273 3438 2744 000622 0194 14631 STD 0200 0273 34380 2744 0006342 0226 14648																						
STD 0075 0075 3386 2716 0009128 0135 14524 0BS 0075 03855 2716 14524 STD 0100 0132 33595 2723 0008502 0157 14555 OBS 0100 0132 33985 2723 14555 14555 OBS 0110 0163 34105 2730 14572 14572 OBS 0112 0209 34205 2735 14594 14594 STO 0125 0224 3426 2738 0007144 0176 14604 OBS 0125 0224 34255 2738 14604 14604 STD 0150 0273 3438 2744 000622 0194 14631 OBS 0150 0273 34438 2744 0006342 0226 14648																						
STD 0100 0132 3399 2723 0008502 0157 14555 OBS 0100 0132 33985 2723 14555 OBS 0110 0163 34105 2730 14572 OBS 0112 0209 34205 2735 14594 STO 0125 0224 3426 2738 0007144 0176 14604 OBS 0125 0224 34255 2738 14604 STD 0150 0273 34380 2744 0006522 0194 14631 OBS 0150 0273 34380 2744 0006342 0226 1468 STD 0200 0293 3445 2747 0006342 0226 1468								338			000912	8	0135									
OBS 0100 0132 33985 2723 14555 OBS 0110 0163 34105 2730 14572 OBS 0112 0209 34205 2735 14572 STO 0125 0224 3426 2738 0007144 0176 14604 OBS 0125 0224 34255 2738 14604 STD 0150 0273 3438 2744 0006622 0194 14631 OBS 0150 0273 34380 2744 STD 0200 0293 3445 2747 0006342 0226 14648				OB:	5 0075	00	75	338	55 2	716				14	524							
0BS 0110 0163 34105 2730 14572 0BS 0112 0209 34205 2735 14594 5T0 0125 0224 3426 2738 0007144 0176 14604 0BS 0125 0224 34255 2738 14604 5TD 0150 0273 3438 2744 0006622 0194 14631 0BS 0150 0273 34380 2744 5TD 0200 0293 3445 2747 0006342 0226 14648				S.	TD 0100	01	32	339	9 2	723	000850	2	0157	14	555							
OBS 0112 0209 34205 2735 14594 STO 0125 0224 3426 2738 0007144 0176 14604 OBS 0125 0224 34255 2738 14604 STD 0150 0273 3438 2744 0006622 0194 14631 OBS 0150 0273 34380 2744 14631 STD 0200 0293 3445 2747 0006342 0226 14648				OB:	5 0100	01	32	339	85 2	723				14	555							
STO 0125 0224 3426 2738 0007144 0176 14604 OBS 0125 0224 34255 2738 14604 STD 0150 0273 3438 2744 0006622 0194 14631 OBS 0150 0273 34380 2744 14631 STD 0200 0293 3445 2747 0006342 0226 14648				089	5 0110	01	63	341	05 2	730				14	572							
0BS 0125 0224 34255 2738 14604 STD 0150 0273 3438 2744 0006622 0194 14631 0BS 0150 0273 34380 2744 14631 STD 0200 0293 3445 2747 0006342 0226 14648																						
STD 0150 0273 3438 2744 0006622 0194 14631 OBS 0150 0273 34380 2744 14631 STD 0200 0293 3445 2747 0006342 0226 14648											000714	4	0176		-							
OBS 0150 0273 34380 2744 14631 STD 0200 0293 3445 2747 0006342 0226 14648											2004: 7		210:		-							
STD 0200 0293 3445 2747 0006342 0226 14648											000662	. 2	0194									
											000637	. ,	0226									
OBS 0200 0293 34445 2747 14848				0B:						747	000034		0226									

TABLE IV .- Continued

FER	ENCE	SHIP					DCTR	MAR	DEN	STATION T	ME.			ORIGIN	ATOR'S		DEPTH	MAX. DEPTH		WAVE	WEA	- CLOUD			NODC
HY DE	NO. CODE	LA •	1/10 1/10	10	VGITUDE 1/10	DRIF	10,		MO DAY HR.1/10		YEAR	CRUIS				TO BOTTOM	0.5	l	FERVATIONS	000				TATION IUMBER	
3 1 E	300	1 EV	4	000N	04	7150W		149	77		198	1966		06			0493	04	00	3 4	X 6				007
-1-		, -,	Ι.	0001	, .		'		WAT	-11	IND	BARG	•	AIR TE			NO I	1	_	121-1	1 //	, 1 0 1 2	' '	'	007
									COLOR	TRANS. DIR.	SPEED OR FORCE	METE	R	DRY 8ULB	WET	COD	1 200	OBSERV	CIAL ATIONS						
									DT	50 05	535		1	067	06	7 5	20								
		MESSENG TIME HR 1/11	of N		RD IPE	DEPTH I	m)	Т	'c	s */	sigi	V A -T	SPECIF	MALY-XI	M1 10?	X 10 ³	SOL VELC	DOLLA	02 ml/	PO4-P ug = 01/t	101AL-1		NO3~N µg = a1/1	SI O4-Si µg - a1/I	ρН
					STD	000			558	3283		91	00	2102	4	0000	14	705							
		19	8		35	000			558	32825		91						705							
					STD	001			548	3289		97	00	2047	2	0 0 2 1		703							
					35	001			548	32885		97		201-				703							
		0.0			STD	002			542	3289		98	00	2041	. 6	004		703							
		0.0	, (35 35	002			542 547	32885 32905		98						703							
				_	STD	002			529	3296		05	00	1975	. 7	006		700							
					35	003			529	32955		05	00	1/1/	, ,	000.		700							
					35	003			380	32945		20						639							
					35	003			411	33455		57						659							
				01	35	004		J	252	33605	26	84					14	594							
					510	005	U	0	261	3381	26	99	00	1040	ا ق	0092	2 14	601							
				01		005			261	33805		99					14	601							
				01		005			284	34055		17						615							
					35	006			243	34010		17						598							
					35	007			254	34150		27						606							
					GT O	007			227	3414		28	0.0	0805	1 1	0119		595							
				06	5 T D	007			227	34135		28	0.0	3. 3.1	0	0.1.3.		595							
					35	010			322 322	3448 34475		47	UU	0631	U i	0133		645							
					STD	012			367	3457	_	50	0.0	0604	^	0149		645 669							
					35	012			367	34570		50	00	0004	·U	J14;		669							
					STD	015			410	3469		55	0.0	0563	. >	016.		693							
					35	015			410	34685		55	00		2	010.		693							
					STD	020			423	3476		59	0.0	0529	3	0191		738							
				01	35	020			423	34755		59	,,		-	/ .		708							
					STD	025		٥	434	3481		62	00	0505	1	021		721							
					STD	030	Ù	0	442	3484	27	64	00	0496	7	0242	2 14	733							
				01	35	030	0	0	442	34840	27	64					14	733							
					STD.	040	0	0	449	3485	2.7	63	00	0511	4	0292	2 14	750							
					35	040			449	34845		63					14	753							
				01	35	045	Q	0	450	34850	27	63					14	762							

CTR	FERENCE Y ID. IE ND.	CDDE	LATITUDE 1/10	LONGITUDE	DIGIFT	MARS SQUA		STA	TIDN IGM			CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX, DEPTH OF S'MPL'S		SERV	A TIDI	 WEA- THER CODE		DES	NODC STATION NUMBER
3	1800	7 EV	47000N	047000W		149	77	11	06	210	1966		061	1097	10	00	3	3	х2	0	3	0075
							COLOR	TRAN	5. DI	WIND SPEED	BARC METE	R	DRY WET COD		SPEC DBSERV							

			COLOR	TRANS.	DIR.	OR	(mbs		BUL	B	D	EPTHS.	DBSER	VATIONS							
			DT	SD	05	520	26	8 083	08	3	6	21									_
MESSENGE CAST TIME OF NO. HR 1/10	C ARD TYPE	DEPTH (m)	† °C	s	٠/	SIGM	A-T	SPECIFIC VOLUM	M.E.	¥ ∆ DYN. x 1	Д М.		DCITY	D2 ml/l	PO 4=P yg • ot/t	fOTAL=F µg = a1/1	NO2-N µg = 01/1	NO3=N μg = e1/1	\$1 O4~\$1 µg = qt/1	ρН	
	STD	0000	0626	33	24	26 I	5	001874	_	00	ا ۵	1.6	738			1					
210	085	0000	0626		235	261		001014		00	00		738								
	STD	0010	0710	33		262		001817	1	00	1.8		776								
	OBS	0010	0710		455	262			•	-			770								
	STD	0020	0743	33	71	263		001676	Э	00	36	14	794								
001	085	0020	0743	33	705	263	36					14	794								
	OBS	0025	0789	331	835	264						14	814								
	STD	0030	0800	33	9.3	26.	16	001588	9	00	52		820								
	085	003Ü	0800	33	930	264	6					14	820								
	SID	0050	0492	339	97	268	39	001176	1	00	68	14	701								
	OBS	0050	0492	33	970	268	39					14	701								
	OBS	0062	0576	34	350	270	9					14	743								
	STD	0075	0517	34	57	27		000757	2	01	04		724								
	OBS	0075	0517	4	570	273	3 4					14	724								
	STD	0100	0472	4	77	275		000564	ð	01	21		712								
	OBS	0100	0472	4	765	275							712								
	STD	0125	0456	54	78	275	7	000538	1	01	34	14	710								
	OBS	0125	0456	34	780	275	7					14	710								
	STD	0150	0450	348	31	276	0	000515	6	01	48	14	712								
	OBS	0150	0450	341	305	276	0					14	712								
	SID	0200	0439	341	35	276	4	000479	1	01	72	14	716								
	OBS	0200	0439	341	345	276	4					14	716								
	SID	0250	0432	348	35	276	5	000473	0	01	96	14	721								
	STD	0300	0425	348	36	276	7	000466	8	04.	20	14	727								
	OBS	0300	0425	348	355	276	7					14	727								
	STD	0400	0414	349	91	277	2	000426	0	02	64	14	739								
	OBS	0400	0414	349		277						14	739								
	510	0500	0401	349		277		000421	4	031	0.7		750								
	ORZ	0500	0401		707	277							750								
	SID	0600	0389	349		277		000417	5	03	49		762								
	OBS	0600	0389	349		277							762								
	SID	0700	0384	349		277		000409	9	03	90		776								
	QBS	0700	J384		122	277							776								
	SID	0800	0378	34		277		000411	4	04.	31		791								
	OBS	0800	0378	349		277							791								
	STD	0900	0376	349		277		000418	6	04	73		806								
	OBS	0900	0376	349		277							806								
	SID	1000	0372	349		277		000414	6	05	14	14	844								
	OBS	1000	0372		333	277							822								
	085	1050	0370	349	35	277	19					14	829								

ERENCE					-	MARSOEN	STATION T	146	-	ORIGI	NATOR'S		OEPTH	MAX,		WAVE	WFA.	CLOUD			
T 10.	COOE	LATITU	OE	LONGITUD	DRUFT	SOUARE	(GMT)		YEAR	CRUISE	STATION		to	DEPTH	095	ERVATIONS	THER	COOES		S	NOOC TATION
NO.	COOE	•	1/10	1,	10 3 ₹	10" 1"	MO DAY H	R,1/10		NO.	NUMBE	1	BOTTOM	S'MPL'S	DIR.	HGT PER SE	CODE	TYPE AM	ī		UMBER
18007	EV	4700	NOC	046450) W	149 76	11 06	230 1	966	0	52	- 1	1207	11	00	2 3	X 2	03			0076
	. ,					WA	TER V	CNIV	BARO	AIR T	MP. °C	vis.	NO.	SPEC							
						COLOR	TRANS. DIR.	SPEED	METE		WET	CODI	OBS.	OBSERVA							
						CODE		FORCE	(mbs!		_		_								
						DT	SD 05	520	26	8 083	08	1	24	L		, ,		,			
	MESSENGI TIME HR 1/10	NO.	CARD	0 6 9 1	H (m)	ī °c	s */	SIGM	A -T	SPECIFIC VOL	UME :10?	E △ 0 DYN. M x 10 ³	. SOI	OCITY	02 ml/l	PO4-P µg - ot/I	TOTAL-P µg = at/t	NO2-N µg - 01/l	NO3-N yg - ot/l	\$1 O4=\$1 µg - 01/1	рН
					200	2053	2201		.	00170		2.)00									
	23	0	ST OBS		000	0951 0951	3396 33960	262 262		00178	56	0000		873							
	23	U	51		010	0885	3396	263		00168	6.7	0017		873							
			085		010	0885	33960	263		00100	o r	001		850							
			51		20	0835	3401	264		00157	78	0034		833							
	0.0	1	OBS		120	0835	34010	264		30131				833							
	_ 0	-	085		25	0831	34010	264						832							
			51		130	0829	3401	264		00157	80	0049		832							
			OBS		30	0829	34010	264						832							
			OBS	. 00	40	0829	34065	265	52				14	835							
			5 T	0 0	050	0764	3429	267	79	00127	42	0078	3 14	814							
			085	0.0	050	0764	34290	267	79				14	814							
			ST	D 00	75	0553	3458	273	30	00079	50	0104	14	739							
			OBS	0.0	75	0553	34575	273	30				14	739							
			51		100	0471	3472	275		00059	66	0121		711							
			OBS		100	0471	34720	275						711							
			085	-	110	0464	34720	275						710							
			5 T		125	0501	3484	275		00054	68	0135		729							
			085		125	0501	34835	275						729							
			OBS		137	0510	34855	275						735							
			51		150	0473	3481	275		00054	0 /	0149		721							
			035		150	0473	34805	275		00017	2			721							
			51		200	0439	3485	276		00047	23	0174		716							
			089		20J 250	0439	34854	276		000/5	0.5	010-		716							
			5 T 5 T		300	0425 0418	3487 3489	27 <i>6</i> 271		00045		0197		718							
			0B5		300	0418	34886	27	-	00043	0 0	0220		724							
			51		+00	0422	3492	27		00042	50	0263		743							
			OBS		+00	0422	34919	27		00072	,	0 - 0 -		743							
			51		500	0403	3491	27		00042	36	0305		751							
			OBS		500	0403	34907	27		000.2	,,,	0 - 0 -		751							
			51		500	0390	3491	27		00041	49	0347		762							
			089		500	0390	34912	27						762							
			51		700	0391	3493	27		00041	42) 3 8 °C		779							
			089	0	700	0391	34927	277	76				1 4	779							
			5.7		300	0384	3493	271		00041	31	0430	14	793							
			083		300	0384	34930	27						793							
			5.1		900	0379	3493	27		00041	70	0471		808							
			085		900	0379	34929							608							
			51		000	0373	3493	27		00041	65	0513		822							
			085		000	0373	34932	27						822							
			51		100	0364	3493	27		00041	43	0555		835							
			0B9		100 150	0364	34932 34936							835							
			000) 1	170	0361	34436	278	D U				14	842							

																													-
REFERENCE	SHIP					MAR	SDEN	Ś	ATION	TIME				ORIGIN	ATOR	S		DEPTH	MAX. DEPTH	000	WAY	VE.		WEA-	CLOUI			NODC	
CODE NO.	CODE	LATITU	1	LON	IGITUDE E	SOIL	JARE		IG M1		- 1	EAR	CRUIS NO.		STATIO		l e	TO MOTTOR	OF	1		TIONS		THER	CODE	1		NUMBER	
		. 7.	1/10		1710	10	1.	MO	_				-	_			+		2 W L C 2			PER 5	E A		TYPE AA		-		-
3 1 8 0 0	7 EV	4701	UUN	0 -+	6310W	149		11	. 07	00		966		0.0			_1	0030	0.5	05	3	4		X 2	0 3	-		007	7
							WA	_	-	WIN	D PEED	BARC)• 	AIR TE	_	_	vis	NO, 280	SPEC										
							COLOR				OR ORCE	METE (mbs		DRY BULB	BUI		ODE	DEPTHS	OBSERV	2 NOIT A									
							DT	3	D 0		15	27	1	111	1.	0	0	17											
	MESSENG		T -]		T		╁	_	1					1	<u>-</u>		T		-	Τ.			T		T			
	TIME	% NO.	CAI		DEPTH (m)		r *c		s ·/.		SIGMA	A — T		AALY-I		₹ ∆ DYN	. M.	VELC		O 2 ml/l		04-8		A L = P	NO2-N ug - 01/1	NO3-1			· C
	HR 3/10	1	+			+		+		-+-						X	10-	+	-		+		-			-	+		
				TD	0000	ì	1027	١,	3385		260	ا ء	00	1988	1	00	0.0	1 1/4	895 -		-			1		1		I	1
	0.0	4	08		0000		1027		385	n	260		00	1 700	, 4	00	00		894										
	00	-		TD.	0010		1017		3335	_	260		OO	1 + 74	٠,٠	00	20		897										
			08		0010		1017		3385	0	260								897										
				TD	0020		1012	- 2	3388		260		0.0	1949	7	00	39		897										
	00	o	08	5	0020		1012	3	3 3 8 7	5	260	7							897										
			0 B		0025		1011		3387	5	260							14	898										
				TD	0030		1010		388		260		0.0	1946	35	00	59		898										
			08		0030		1016		3387		260								848										
			08		0040		1010		3387	5	260								900										
				TD	0050		0865		3393	,	263		00	1690	2	00	95		848										
			08		0050		3865		3392		263								848										
			0 B	10	0070		0644 0680		3458 3480	U	271		-0.0	0788		0.1	27		774 792										
			0B		0075		3680		3479	5	273		00	0100	, ,	01	20		792										
				TD	0100		0558		3483	,	274		0.0	0617	73	aì	44		748										
			ОВ		0100		0558		3482	5	274		00	001		0 -	7-7		748										
				TD	0125		0498		3476	-	275		0.0	0603	3.2	0.1	59		727										
			08		0125		3498		3475	5	275						-		727										
			S	TD	0150		0460		3479		275	8	0.0	0537	7 7	01	73	14	716										
			ΟВ	S	0150		0460	1	3479	0	275	8						14	716										
			S	T D	0200		0449	- 3	3487		276	5	00	U475	Ū	01	99	14	720										
			08	5	0200		0449	-	3486	5	276	5						14	720										
			S	ŢD	0250		0433		3488		276		00	045]	16	04	22	14	722										
				TD	0300		0421		3489		277		00	0434	+8	02	44		725										
			08		0300		0421		3489	2	277								725										
				TD	0400		0410		3492		277		00	0412	2.7	06	86		730										
			08	-	0400		0410		3491	Q	277								738										
			_	TD	0500		0388		3491		277		00	0401	Γ÷	03	27		745										
			OB		0500		0388		3491		277								745										
			OB	S	0550		0379	- 1	3491	ь	277	6						14	749										

TABLE IV .- Continued

REFERENCE					* MAB	SDEN	IT ATZ	DN TI	ME I			ORIGIN	ATOP"		Т	OEPTH	MAX.	T	w	AVE		WEA-	CLOUD			NORG
CTRY ID.	SHIP	LATITUO	E I	ONGITUDE	S SOIL	ARE	317 ((MTI	me	YEAR	CRUISE		TATIO		۲.	TO	DEPTH	0		VA TIO	NS	THER	CODE		ļ	STATION
CODE NO.	CODE	•	1/10	1/10	10'	1.	MO 0	AY H	R,1/10		NO.	1	NUMBE	R	1	BOTTOM	S'MPL"	S DIR.	. HG	T PER	SEA	CODE	TYPE AN	T		NUMBER
31800	7 EV	47000	NC	046100W	149	76	11 0) 7 i	18	1966		06	4		(0302	03	0	8 1	4	1	X 2	0 3		- 1	0078
						WA	TER	v	IND	BARC		AIR TE	MP. C		ıs.	NO.	500	CIAL	٦.							
						COLOR	TRANS.	OIR.	SPEED OR FORCE	M ETE	R	DRY	W E1	lcc	200	OBS. OEPTHS	OBSERV		s							
						DT	\$D	04	510	27	_	111	11		5	21			\dashv							
	MESSENGR TIME HR 1/10	인 NO.	CARD TYPE	DEPTH (m)	1	*	5	٠/,.	SIGN	A-T		VOLU		₹ ∆ DYN. x 10	м.		JND	O 2 ml		PO4~		TOTAL=P yg - at/1	NO2-N ug - a1/l	NO3-N	SI O4-	
	HR 1710	1			+-										_	+	_		-		+		-			1
		1	STE	0000		013	338	i e	261	ا 16	0.01	961	9	000	0.0	14	894		1		- 1			1		1
	018	8	OBS	0000		1013	338		26				_				894									
			085	0006		013	338		26								895									
			ST	0010		997	3 3 8	36	26		001	938	2	0Ū2	20		890									
	0.0	0	085	0010	(997	338	355	26	0.8						14	890									
			STI	0020	(995	338		261		001	1937	0	0 U 3	39	14	891									
			0B5	0020		995	338		261							14	891									
			OBS	0025		995	338		26								891									
			STI			991	338		26		001	1932	7	0 U S	56		891									
			085	0030		991	336		26								891									
			OBS	0040		950	3 3 8		26								877									
			STI			808	342		261		001	1399	خ ا	Ū U 9	92		830									
			085	0050		808	344		261								830									
			OBS	0070)603)594	344		27 27.		0.00		,	01-			756									
			STI OBS	0075)594	345		27.		000	1861	4	012	20		754									
			085	0075		0560	344		27								754									
			-)552	345										740									
			OBS OBS	0084 0086)51u	345		27								739									
			085	0030)499	349		27								722									
			085	0094)532	34		27								735									
			STI			1499	346		27		0.00	1665	u)	013	3 0		722									
			085	0100)499	346		27.		000	,,,,,		0			722									
			STI			529	348		27		000	587	9	015	55		740									
			085	0125		1529	348		27			'					740									
			OBS	0132)495	34		27								727									
			STI		()499	348	3 7	27		000	523	5	016	59		733									
			OBS	0150		1499	348		27		- 3 (/	-				733									
			STI	0200	(477	348		27		000	0504	.5	019	95		706									
			OBS	0200	(477	348	367	27								732									
			STI	0250	()445	348	38	27	66	000	1464	8	021	19	14	727									
			OBS	0280	Ų	421	346	887	2.7	70						14	722									

FERENC RY ID).	SHIP	LATITU			NDCTR	MARSO	RE		TION TI		YEAR	CPUI	E 5	ATOR'S		DEPTH TO BOTTO	OF	OB:	WAV SERVA	TIONS	WE THE	ER (CODES		S	NOOC TATION LUMBER
	\rightarrow			1/10	1710	-	10*	1,		DAY	-	_	NO	+_'	NUMBER	-	001101	N S'MPL	S DIR.	HGT P	PEA SE	A 00.	14	PE AMT	-		
180	07	ΕV	4718	BON C	46100W	1 1	149	76	11	07	37	196	6	06	5		0368	3 03	04	2	2	_ X	2	0 3			0079
								WA	TER	W	INO	BAR	RO- L	AIR TE	MP. °C	vis.	NO.	CPS	ECIAL								
								CODE	TRANS	DIR	SPEED OR FORCE	M E1		DRY DRY	W E1	COD	OBS.	OBSERV	VATIONS								
								DT	SD	03	514	2.	68	100	100	5	15										
	- 1	MESSENGE TIME d	CAST NO.	C ARD TYPE	DEPTH (m 1	T	°C	5	٠/	SIGN	A-T		MALY-XI	07	∆ D YN. M X 10 ³	, , , ,	TOCITA	O ₂ ml/1		04-P - 01/I	TOTAL-		02-N 2 - at/l	NO3-N NB - al/l	SI O4-Si ug - at/I	
	Ī																										
				STC	000	0	0 9	783	33	94	26	17	00	1854	6 (0000) 14	4884									
		037	,	OBS	000	0	0 9	983	33	935	26	17					14	4884									
				STO				982	3.3	94	26	17	0.0	1855	0 (019	9 14	4885									
				085	001			982		935	26							4885									
				STO				976		94	26		00	1847	5 (0037		4885									
		000)	OBS	002			976		935	26							4885									
				085	002			968		935	26							4883									
				STO				966		94	26		0.0	1833	37 (0055		4883									
				OBS	003			966		935	26.							4883									
				OBS	004			964		940	26				_			4884									
				STC				310		34	26		0.0	1301	.9 (0087		4833									
				085	005			310		340	26							4833									
				STC				590		74	27		0.0	0846	8 ()114		4795									
				OBS	007			590		735	2.7							4795									
				STO				564		78	27		00	0783	0 (134		4790									
				085	010			564		780	27							4790									
				085	011			544		835	27					. 7		4785									
				STD				570		72	27		0.0	0713	34 (15		4756									
				085	012			570		720	27							4756									
				STC				530	_	16	27		0.0	0639	3 (17(-	4744									
				085	015			30		760	27							4744									
				510				+77		83	27		0.0	0532	22 (199		4731									
				OBS	020			+77	-	830	27				_			4731									
				STD				44		88	27			0463		1224		4727									
				STO				+29		90	27		0.0	0440)5 (1246	_	4769									
				085	030			+29	_	896	27							4729									
				085	031	Ų	0.4	+28	34	897	27	70					1 -	4730									

REFERE C18Y	ID.	SHIP	LATITU	1	LONGITUDE	DRIFT INDC78	MARS SQU	ARE	STATION 1		YEAR	CRUI	ORIGINA SE SI	TOR'S ATION UMBER	\exists	DEPTH TO BOTTO	OF	H 08	WAVE SERVATIONS	WEA- THER CODE	CODES		ST	IODC ATION JMBER	
-				1/10	1710	-	10*	1.		R,1/10		+	+		-		3 M		HGT PER SEA		TTPE A M	5	-		
3 1	3007	EV	4740	ON	Ú46100W		145	76 WA		066	1966	1	D 6 0			107	5 1	د 0 0	3 4	X 4	013		!	00801	
							-	COLOR		SPEED	METE		DRY	WET	VIS.	NO, OBS.	- COSE	PECIAL RVATIONS							
								CODE	Iml DIR.	FORC			BULB	BULB		DEPTH	5 0030								
								DI	5D 05	524	25	4	106	106	4	2.3									
		MESSENGE TIME HR 1/10	및 NO.	C ARC TYPE	DEPTH (m)	T	*c	s ·	SIG	MA-T		FIC VOLUA	Λ.Ε. Σ. Ο Υ.	∆ D N. M 10 ³	\$0 VE	LOCITY	O2 m1/	PO4=P pg - at/l	101AL=P pg = 01/1	NO ₂ =N µg = at/i	NO3=N µg - of	\$1 O4=\$1	рН	S C C
																									7
				ST				762	3377		39	0.0	1650.	. 0	000		4799								
		061	6	048				762	33770		39						4799								
				ST				703	3377		30	UÜ	.د 165)	, 0	017		4801								
				085				763	33770		36		1570				4801								
		00	1	ST 085				910 915	3417		47	90	1570	5 0	033		4863								
		0.0	Ţ					400 410	34170		4.7						4863								
				053 51				833	34085 3394		42 41	0.0	1628		Ü 4 9		4859								
				085				833	33940		41	00	11050	5 0	044		4833 4833								
				085				868	34165		54						4850								
				ST				500	3400		69	.01	1365	a a	079		477s								
				085				568	33995		009	01	, , , , , , ,		· .		4773								
				085				544	34190		700						4727								
				085				559	34575		29						4739								
				ST				486	3406		744	0.0	00658	a 0	104		4716								
				065	007	5	0	486	34655	2.7	44						4712								
				SI	D n10)	0	471	3474	2.7	152	0.0	0561	0 0	119	1	4711								
				085	010	J	Ü	471	34740	2.7	152					1	4711								
				065				437	34705		53					1	4699								
				ST				435	347.		154	UC	0571	3 0	434	1	4 700								
				OBS				435	34705		54						4700								
				ST				428	3463		64	0.0	004741	3 0	147		4703								
				085				428	34828		64						4 703								
				5 T				412	3485		67	UU) 44481	5 U	17 ₀		4705								
				085				412	34847		67		10				4705								
				ST 5T				406	3467		70		0430.		192		4711								
				065				402 402	3438		71	0.0	00+2+	Į ij	213		4717								
				ST				397	34875 3489		72	0.0	0420	2 2	256		4717								
				085				397	34843		172	00	10420	7 0	400		473L 4732								
				ST				394	3491		74	ac	0413	7 a	297		4132 4747								
				065				394	34907		74	0.0	/0415	, ,	_ + /		4747								
				ST				390	3492		75	00	0412	7 G	39		4762								
				085				3 7 0	34913		75			. 0	/		4762								
				ST				382	3472		76	JO	0409.		280		4776								
				065				384	34920		776			_			4776								
				ST				377	3493		777	0.0	0448	J 0	421		4743								
				088			Ũ	377	34926		7.7						4790								
				ST			Ų	360	2443	2.7	78	J.C	.,-0	2 0	401		4800								
				082				368	34424		770					1	4803								
				069	0 48	0	0	363	34453	2.7	7.4					1	4814								

	ID,	SHIP	LATITUI		LONGITU	10	50	SDEN UARE	STATION (GM		YEAR	CRUISE		TATIO	V	DEPTH TO BOTTOM	MAX. DEPTH OF	1	WAVE SERVATIONS	WEA- THER CODE	CLOUD		5	NODC TATION UMBER	
DE N	١٥.			1,10		1/10	10*	1"	MO DAY	HR, 12	10	NO.	N	¥U M BE	R	80110×	S'MPL"	DIR	HGT PER SEA	CODE	TYPE A N	Τ:	- 14	Ower	_
180	007	EV	4800	ON	04610	WE	14	9 86	11 07	08	4 1960	5	06	7		1152	11	0.3	3 4	X 4	1 3 3		-	008	1
								WA	TER	WIND	BAF	20- 4	IR TEA	MP. °C	vis.	NO.	< 0.0	CIAL							
								COLOR	TRANS D	IR.	OR MET	ER	DRY ULB	WET	CODE	OBS. DEPTHS	OBSERV	ATIONS							
								DT		$\overline{}$	ORCE (mt			_	-										
	_							01	SULO	1/3	20 -	54 1	06	10	b 3	۷ ۵					,				_
		TIME O	CAST NO.	CAR TYP		PTH (m	1	т *с	5 *:		SIG M A -T	SPECIFIC	VOLU:		x 10 ³	VELO VELO		02 m1/1	PO4=P pg = ot/I	TOTAL-9 pg = 01/1	NÖ2~N µg + at/l	NO3=N NO3=N	\$1 O4-\$1	рН	
				-		2000		0913	32.13	.	7	361	-01	,	nuna	1	i								
		0.84		0B		0000 0000			3413		2644 2644	001	60I	U	0000		861								
		004	,			0010		0913 0913	3413		2044	0.0.1	602	2	0016		861 862								
				0B:		0010		0913	3413		2644	001	002	*	0010		862								
						020		0911	3413		2044	001	605	5	0032		863								
		001		QB		020		0911	3412		2644	001		_			863								
				0B.		0025		0900	3412		2645						86C								
						0030		0871	3413		2650	0.0.1	547	1	0046		850								
				06.		3030		U871	3412		2650						85u								
				06)U36		J769	34.0		2656						810								
				ОЬ	S	0034		U813	3418		2664						830								
				5	TD i) Ū 5 U)	0699	3436)	2693	001	137	' Б	UU 75	14	790								
				ОВ	5 (0050)	0643	3435	5	26 +3					14	7 ∃0								
				S	TD I	0075	,	0469	3468	5	2747	000	625	3	0097	14	705								
				ОВ	S 1	0075		0464	3467	7.5	2747					14	705								
				S		0100		Ú430	3474		2755	000	559	1	0 + 1 2		640								
				03) 1 û U		Ü436	3472		2755						696								
						125		0429	3470		2758	000	528	U	0125		698								
				08		125		0429	3475		2758						698								
						150		0424	3478		2761	CUL	506	0	U + 38		700								
				08		0150		0424	3478		470i						700								
						00050		0428	3487		2767	000	451	. 5	0152		711								
				QВ		0200		0428	3486		2767		_		0131		711								
						1250		0414	3487		2769		1440		0184		714								
						300		0404	3487		2770	000	435	-	0-06		710								
				OB		030U 0400		0404 0398	3486 3488		2770 2771	30.	5. 1	2	0250		718 732								
				0 B		34 JU 34 JU		0398	3400		2771	100	431	- 2	しとうし		732								
)400)500		0392	3489		2773	0.01	1424		0292		740								
				0 B		5500		0392	3469		2773	000		-	U = 12		746								
)60J		0391	3490		2774	0.0	422	0.1	0335		763								
				08		0600		0391	3490		2774	000			5-55		763								
						700		0389	3491		2775	000	423	ΙŪ	0377		770								
				08		370U		J389	3491		2775		_ =	-			770								
						00800		0385	3492		2776	000	421	. 7	0419		743								
				ОВ		3800		0385	3492	2:0	2776					14	793								
						0000		0380	3493		2777	000	1420) -4	0461		806								
				ОВ		0900		0380	3492		2777						808								
				S	T D	1000)	0369	3493		2778	000	414	-9	0503	14	82Ū								
				0日	S	1000)	0364	3446	9	2778					14	520								
				QB	S	1060)	0359	3493	35	2780					14	826								

REFERENCE CTEY ID.	SHIP	LATITU	DE	LONGITUDE	MARSDEN 3RAUQ2	STATION T		YEAR C		ATION	-	OEPTH TO BOTTOM	MAX. OEPTH OF		WAVE ERVATIONS	WEA- THER CODE	COOES		\$	NOOG TATION IUMBER	
CODE NO.			1/10	1/10	10" 1"	MO DAY				UMBER	-+		S'MPL'S	1	HGT PER SE	4 0001	1071 200	1		OWNER	
31 8007	EV	4819	ON	046100W	149 86			1966	068			1152	11	01	3 2	X4	013	l		0082	
					WA		SPEED	BARO-	AIR TEM		vis.	NO. OBS.	SPE	CIAL							
					COLOR	TRANS. OIR.	FORCE	METER (mbs)	ORY BULB	WET	CODE	DEPTHS	OBSERV	A TION S							
					DT	SD 07	520	254	067	067	3	21									
	MESSENGR TIME 0	CAST NO.	CARC		T °C	s ·/	SIGM		PECIFIC VOLUM	AE NY	△ 0 N. M.	SOF	INO	O 2 ml/1	PO4-P	TOTAL-P pg = a1/1	NO2-N µg - at/l	NO3-N yg - ol/l	\$1 O4=\$1 µg = a1/1	рН	SCC
	HR 1/10					1	+				-	+	+						_	1	+
			ST	D 0000	0668	3368	26	44	0015938	8 D	000	1 14	761		1 1				1	1	1 1
	108		085		0668	33680			002272				761								
			ST		0745	3419	26		0013196	b 0	015	14	799								
			OBS		0745	34185	26	74				14	799								
			ST	D 0020	0700	3411	26	74	0013208	8 0	028	14	782								
	001		OBS	0020	0700	34105	26	74				14	782								
			085		0721	34195							792								
			ST		0733	3428	261		0012390	6 0	041		799								
			OBS		0733	34275							799								
			ST		0449	3428	27		000897	7 0	062		688								
			OBS		0449	34280							688								
			OBS		0423	34330	-		000616	1 0	001		678								
			ST OBS		0424	3463 34625	27		000615	3 0	081		686 686								
			ST		0457	3481	279		000517	7 0	095		706								
			OBS		0457	34805			300317	, ,	0 95		706								
			ST		0462	3486	276		0004884	4 0	108		713								
			085		0462	34855			000.00		- 00		713								
			ST		0459	3486	276		0004879	9 0	120		716								
			085		0459	34855							716								
			S.T		0444	3486	276		0004770	0 0	144		718								
			OBS	0200	0444	34855	27	65				14	718								
			ST	D 0250	0435	3489	276	68	000446	3 0	167	14	723								
			ST	D 0300	0427	3491	27	71	000427	1 0	189	14	728								
			0B5	0300	0427	34911	27	71				14	728								
			ŞT	D 0400	0418	3491	27	71	0004319	9 0	232	14	741								
			OBS		0418	34909							741								
			ST		0395	3491	27		000414	8 0	274		748								
			085		0395	34907				_			748								
			ST		0387	3491	27		000412	3 0	315		761								
			085		0387	34911	_		000.00		7 - 7		761								
			ST		0376	3491	27		000408	3 0	357		773								
			0BS		0376 0376	34912 3493	27° 27°		000003	, n	407		773								
			0BS		0376	3493			0004024	+ 0	197		790								
			51		0366	3493	27		000401	۰ ۰	427		790								
			0B9		0366	34929			000401	b U	437		802								
			S1		0363	3492	27		000406	a n	4 78		802 818								
			085		0363	34929			550.50	, 0	. , 0		818								
			51		0360	3493	27		000411	7 0	519		833								
			089		0367	34929				. 0			833								

E	SHIP	LATITU	DF 10	NGITUDE E		SDEN	STA	TION (GMT	TIME	YEAR		DRIGIN			DEPTH TO	MAX		WAVE SERVATIONS		EA-	CLOUD			NODC STATION]
	CODE		1/10	NGITUDE E	10.				HR,1/10	ICAK	CRUI	3. S	MUN	BER	801104	0.5	00.	HGT PER SI	100	DDE	TYPE AM			NUMBER	
7 C	EV	4834	ONO	46100W	149	86	11	07	134	1966	5	06	9		2012	15	06	3 3)	(4	0 3			0083	3
						WA	_	-	WIND	BAR		AIR TEA	_		NO. OBS.	SPE	CIAL								
						COLOR	TRANS	S DIR	SPEED OR FORC			DRY	BU	ET COD	DBS. DEPTHS	OBSER	VATIONS								
						DT	50	04	_		.7	083	0	83 1	24										
	MESSENGR			T				1	1		T			5 A D						-					_
	TIME OF	CAST NO.	CARD	DEPTH (m)	1	D* 1	s	٠/	SIG	MA-T	ANG	FIC VOLU	۳.E	₹ Δ D DYN. M X 10 ³	· \ \ \rightarrow ET	UND OCITY	0 g m1/1	PO4~P >9 * 01/1	TOTA:		NO2-N ug = 01/l	NO3-N pg - oi/l	SI Q4-S		
	HR 1/10			+	-		-		_		-		-	X 10	+-	-			-	-				+	_
	1	l	STD	0000	- 1	0719	3.3	308	75	90	0.0	2110	١	0000	1 14	773		1		- 1		l	1	1	
	134		085	0000		0719		3075		90	0.0	2210	,	0000		773									
			STD	0010		3719		308		90	0.0	2112	3	0021		774									
			OBS	0010	(719	3 3	3075		90					14	774									
			STD	0020		719		308		90	00	02113	7	0042		776									
	002		OBS	0020		0719		3075		0.0						776									
			085 510	0025		07 1 9 0725		3075 •04		90	0.0	1407	6	0060		777									
			085	0030		0725		035		05	00	, 1 -0 1	0	0000		793									
			STD	0050		3595		+30		02	0.0	1051	1	0084		748									
			OBS	0050		3595		295		02						748									
			STD	0075	(0478	34	+69	27	48	00	0623	Q	0105	14	709									
			085	0075	ĺ,	3478		690		48						709									
			SID	0100)462		+78		56	00	0545	6	0120		708									
			OBS	0100		1462		775		156			_			708									
			STD	0125		0460		84		61	00	0501	Z	0133		712									
			0B5	0125 0150		0460 0451		∙835 •84		61 62	0.0	00494	2	0146		712									
			STD OBS	0150		0451		835		62	00	JU474	2	0140		712									
			510	0200		0438		86		65	0.0	00470	5	0170		715									
			085	0200		0438		855		165						715									
			STD	0250	(0431	34	88		68	0 (00449	5	0193	14	721									
			STD	0300		1424		90		70	00	00432	8	0215		727									
			OBS	0300		1424		890		70				_		727									
			STD	0400		0414	_	+91		772	00	0426	7	0258		739									
			OBS	0400 0500		0414 0402		•906 •91	_	772	0.0	20172	_	0300		739									
			STD	0500		0402		+91 +91		773	0 (00422	ر	0 > 0 (751									
			STD	0600		3389	-	91	_	774	0.0	00419	0	0342		762									
			OBS	0600		389		905		74	-		-			762									
			STO	0700		382		91		775	00	00418	8	0384	14	775									
			OBS	0700		382		907		75						775									
			STD	0800		3377		+91		76	0 (00420	6	0426		790									
			OBS	0800		3377		90:		776	~	20616	E	0		790									
			S T D O B S	0900 0900		0371 0371		+92 +917		777 777	0 (00416	0	0468		804									
			510	1000		0367		+91 i	_	778	0.0	00419	0	0510		819									
			OBS	1000		0367		+919	_	778			~	U- 1 (819									
			STD	1100		0363		92	_	778	0.0	00421	2	0552		834									
			085	1100		0363		921		778		-		-		834									
			STD	1200	(0360		•93	27	779	00	00421	5	0594		850									
			085	1200		0360		+92		779						850									
			STD	1300		3356		+93		780	0 (00422	6	0636		865									
			OBS	1300		3356		930		780	0.0	20610		05.71		865									
			STD OBS	1400 1400		0355 0355		494 4944		781 781	U (00419	_	0078		+882 +882									
			5 1 0	1500		0351		195		782	0.0	00420	0	0720		·897									
			310	1500		0351		1941		782	0 (~	0.20		897									

REFERENCE	CHIR			LONGITUDE HE	MAR			TION T	IME			ORIGIN	ATDR'S		DEP		MAX, DEPTH		WAVE	WEA-	CLOUD	Ī		NDDC
CTRY ID.	CDDE	LATITU		LDNGITUDE NO	5Q:U	ARE 1°		IGMTI DAY H	n 1 (10	YEAR	CRU		TATID		BOTT	D TOM	DF S'MPL'S		SERVATIONS	THER	TYPE AM			UMBER
31800	EV	4742	1/10	045240W	149	+ -	11		195	1966	+	07		`	0.2									
1 21/000	1 - 4	4142	-014	043240#	147	WA			VIND	_	+	AIR TE		-	T	- 1	03	07	3 2	x2	0 3	I	ı	0084
						COLOR	-	+	SPEED	14.5	ER	DRY	WET	COD	DEP	BS	SPEC SSERVA							
						DT	50	10	S22	-	\rightarrow	111	11		1	3								
	MESSENGI TIME HR 1/10	T NO.	CARE		Т	*	s	٠/	SIG	M A - T		IFIC VOLU		≦ △ D 2YN, W x 10 ³		SDUI		D2 ml/l	PO4-P µg = 01/I	ΤΟΤΑ L P μg - α1/1	NO2-N µg = at/1	NO3-N ug - at/1	ا/اه + ولا	рН
	,		ST			994		90		12	0	01901	7	0000	-	148								
	19	5	0 B 9			994		895		12							888							
			ST			964		90		17	0	01856	1	0019		148								
			085			964		895 02		17	0	01717		000			878							
	00	0	ST			931	_	.Ú15		32	U	01717	8	003.		148								
	50	U	089 51			895		13		32	0	01583	1	005			869 859							
			OBS			895		125		46	0	01703	1	003.			859							
			SI			787		56		96	0	01109	4	0080		148								
			OBS			787		555		96	0	0110		000	-		827							
			ST		Q	725	34	87		30	C.	00797	1	0104		148								
			069	0075	Q	725	34	865	2.7	30						148	811							
			ST	D 0100	0	683	34	87	27	36	0	00744	7	012	3	14	798							
			OB5	0100	0	683	34	865	27	36						14	798							
			ST	D 0125	C	632	34	83	2.7	139	0	00712	0	014	1	14	782							
			089	0125	0	632	34	825	2.7	39						147	782							
			ST	D 0150	0	56U	34	78	27	45	0	00659	9	0159	9	14	756							
			085			560		780		45						14	756							
			089			559		865		52						14								
			088			493		740		50							734							
			ST		-	487		83		58	0	00543	5	0189		14								
			OBS			487		830		58						14								
			51			445		07		65	0	00477	0	0 2 1 4		147								
			083	0252	Ü	446	34	870	27	65						147	728							

DE	ID. NO.	SHIP CODE	LATITU	1/10	DNGITUDE NOCTA	MARS SQU			IDN T		YEAR	CRUISE NO.	DRIGINATO STA NU	TION	DEPTH TO BOTTO	DEPTH	082	WAVE ERVATIONS HGT PER SE	6006	CODES		5	NDDC TATION IUMBER
1 8	1007	ΕV	4649	UM 0	44395W	149	64			014	1966		071		013	7 01	13	3 3	x 2	0 3			0085
						-	W.A.	_	-	W IN D	BARC	>- ├─	AIR TEMP.	VI		SPE	CIAL						
							COLOR CODE	TRANS.	DIR.	OR	1-1-			VET CO	DEPTH	SOBSER	ATIONS						
							DT	SD	09	+	_	5 1	28	122 7	10	1-							
		MESSENGA TIME MR 1/10	T NO.	CARD TTPE	DEPTH Imi	T	ζ.	s	٠/	SIG	MA-T		VOLUME ALT-X107	₹ △ t DYN. / X 10 ³	W	DUND	D2 ml/8	PD4~P yg + 01/1	TOTAL=P µg = 01/1		ND3-N yg - al/l	\$1 D4-\$1 µg - a1/1	pН
				STO	0000	0	979	34) n	26	27	003	7594	000	0 1	4804							
		0.1	4	OBS	0000	0	979		055		27			000		4884							
				SID	0010	0	٦78	3.4	U6		27	0.01	7598	001		4885							
				OBS	0010	0	978	3.4	055		27					4885							
				STD	1020	0	974	34	V6	26	28	001	7555	003		4885							
		0.0		085	0020	Ú	974	34	055	26	28				1	4885							
				STD	0030	0	946	34	08	26	34	001	6949	005	2 1	4877							
				085	0030	0	946	34	U80	26	34				1	4877							
				SID	3050	J	918	34	30	26	56	001	4925	008	4 1	4873							
				J85	0050		918	34	300	26	55				1	4873							
				085	0054		915		300	2.6	57				1	4872							
				510			57J		39		13	000	14534	011	5 1	4743							
				OBS	0075		57u		390	2.7	13				1	4743							
				OBS	0079		479		555		3.7				1	4709							
				510			469		56		38	000	17180	013	6 1	4708							
				085	0100		469		555		3.8					4708							
				035	0122	Ü	464	34	560	2.7	39				1	4709							

REFER	ENCE	ENIR			~ E	MARSDEN	STATION TIE	ME		OF	IGINAT	OR'S		DEPTH	MAX.		WAVE	WEA-	CLOUD			NODC
CODE	ID. NO.	CODE	LATITU	1/10 LI	ONGITUDE TO	SQUARE	MO DAY H		YEAR	CRUISE NO.	STA	TION	<u> </u>	TO MOTTOM	OF S'MPL'S		ERVATIONS	THER	TYPE AM		2.	TATION
-	8007	Ev	455		43550W	149 53			1966		072		寸.	4023	15	14	9 4	X 2	0 3			0086
				1	' '	WA		INO	BARO	· -	RTEMP	. с	V15.	NO.	SPEC					•		1
						COLOR	TRANS. DIR.	SPEED OR FORCE	METEI (mbs)	R DR		WET BULB		OBS. DEPTHS	OBSERV	TIONS						
						DT	SO 12	S45	07			161	6	36								
		MESSENGA	CAST	CARD		T				SPECIFIC	VOLUMI	. ≥	Δ D.	502	ONU		PO4-P	TOTAL-P	NO2-N	NO3-N	5104-51	
		*1ME HR 1/10	CAST NO.	TYPE	DEPTH (m)	7 *C	s */	SIGM	A-1	ANOMAI	LY-X107	X	10 ³	VEL	CITY	O 2 mi/l	μg - αt/l	μg = α1/1	ug - 01/1	μg - σt/1	μg = σt/l	рН
	Ī	-					1							1								
		10	0	5TD	0000	1322	3391	255		0024	113	00	000		002							
		10	()	510		1319	3391	255		0024	681	00	25		003							
				085	0010	1319	33905	255							003							
				STO		1214	3376	25 t		002	017	0.0	149		967							
		DÜ	2	085	0020	1214	33760 3379	256		003	1000	0.0	777		967							
				STD 250	0030	1182 1182	33785	251		002:	080	00	72		958 958							
				STD		0918	3444	266		0013	925	01	109		875							
				085	0050	0918	34435	206	5 7					14	875							
				085	0056	0895	34625	268							870							
				085 STD	0065	0921 0870	34815 3476	269		0010	833	Ú I	140		863 865							
				085	0075	0870	34760	270							865							
				OBS	0080	0858	34825	270							862							
				STD	0100	0917	3504	27:		0009	9570	0 1	100		890							
				0B5 STD	0100 0125	0917 0819	35035 3492	271		0008	2003	3	189		890 856							
				OBS	0125	0819	34920	272		0000	,,6,	0.	. 0 ,		856							
				STD		U785	3498	27		0008	3125	04	410		848							
				085	0150	0785	34475	273							848							
				SID	0200	U6U3 U6U3	3479 34787	274		0007	7144	0.	49		782 782							
				OBS OBS	0242	0528	34769	274							758							
				STD		0548	3484	275		0006	137	0.	282		769							
				OBS	0255	0557	34872	27							774							
				STD		0488	3489	276		0005	107	0.	310		753							
				08s	030U 0341	0488	34891 34876	276 276							753							
				OBS	0361	0470	34902	276							756							
				OBS	0370	0439	34887	276							744							
				STD		0469	3494	276		0004	+673	0 -	359		764							
				0BS 0BS	0400 0420	0469	34935 34907	276 276							762							
				085	0430	0462	34937	276							764							
				STO		0455	3496	27		0004	+412	0 4	+04		773							
				085	0500	3455	34963	27							773							
				085 5TD	0550	0403	34897 3491	27		0004	37.7	ο.	+48		759 768							
				035	0600	0403	34905	27		0000	. J 🕶 1	0-	. 40		768							
				OBS	0628	0439	34972	27	74						788							
				OBS	0675	0437	34927	27				_			782							
				STD	0700	0427	3497	27		0004	+211	04	491		795							
				OBS STO		0427	34974 3495	27		0004	1259	0.	> 3 3		795 803							
				OBS	2820	0407	34949	27		000	,	٠.			803							
				STC	0900	0378	3443	27	77	0004	+188	0:	75	14	807							
				OBS	0900	0378	34925	27		001	. 300	~ .	¬		807							
				0B2	1000	0392	3496 34957	27		0044	+208	. 06	b 1 7		830							
				510		0369	3493	27		0004	+218	06	659		837							
				OBS	1100	0369	34930	2.7	7.8					14	837							
				STD		0374	3495	27		0004	+239	0.	702		856							
				085 510	1200	0374	34947 3495	271		0004	1250	Α.	744		856							
				085	1300	0371	34951	271		000	· ∠ J C				872							
				STE		0367	3445	27		0004	+292	0	7ь7		887							
				CBS	1400	0367	34951	27	80					14	887							
				STO		0365	3496	27		0004	430 c	0.0	830		903							
				OBS	1500	0365	34457	27	31					1 4	903							

REFERENCE	T					a a	MARSOEN	STATION TI	ME			RIGIN	ATOR'S		DEPTH	MAX. DEPTH		WAVE	WEA-	CLOUD	Τ		NODC
CTRY IO.	CODE	LATITU		LONG	HUDE	DRIFT INDCTR	SOUARE	(GMT)	17/10	YEAR	CRUISE NO.	2	TATION		TO BOTTOM	OF	l	ERVATIONS	THER	TYPE		S1 N	UMBER
31800	7 EV	4451	1/10	042	1/10 350W		149 42	11 08 2	217	1966		07		\dashv	4755	S'MPL'S	22	HGT PER SE	X 2		1		
3 1000	d cv	4451	UN	042	. 550W	1	WA1		IND		1		J NP. °C	┰┸	NO.	<u> </u>		[4]2]	X Z	() 3	1	- 1	0087
							COLOR	TRANS. OIR	SPEED		8 ()RY	WET	VIS.	OBS.	SPEC OBSERV	TAL ATIONS						
							CODE	(m)	FORC		_	UL9	8778	_	DELIUS								
							DT	SD 21	510	11	5 1	83	178	7	32								
	MESSENG	CAST	C AR TYP	E E	DEPTH (m)	ĭ °C	s ·4.	SIG	MA-T	SPECIFIC	VOLU	ME 0	∆ D (N. M (10 ³	. VELO	DCITY	0 2 ml/l	PO4-P ug - 01/1	10TA L-P	NO 2~N µg - al/l	NO3-N vg - at/l	\$1 O4-\$1 yg - a1/1	р∺
	HR 1/10	0		\rightarrow					-				+		+	-		+ +					
	ļ	1	5	TD I	000	0	1781	3572	25	88	002	126	1 0	000	1 15	168		1 1		1	l	1	1
	21	. 7	08.		000		1781	35715		88	002					168							
				TD	001		1782	3571		88	002	135	4 0	021		170							
			08		001		1782	35710		88				2.0		170							
	00		0B	T D	002		1789 1789	3575 35745		89	002	129	8 0	043		174							
	00	12		5 TD	003		1789	3577		89	0.02	135	1 0	064		174							
			08		003		1796	35765		89	002	100	1 0	004		178							
				TD	005		1800	3586		94	002	086	0 0	106		183							
			ОВ	S	005		1800	35855		94					15	183							
			08		006		1813	35935		97						190							
			-	T D	007		1780	3609		17	001	880	5 0	156		184							
			08.	5 7 D	007		1780 1741	36385 3635		17	001	609	2 0	199		184							
			08		010		1741	36345		346	001	407) (177		180							
				TD	012		1729	3638		52	001	568	1 0	239		181							
			08.		012	5	1729	36375		552						181							
			5	TD	015		1679	3628	26	556	001	534	3 0	278	1.5	169							
			08		015		1679	36275		556						169							
			08		017		1670	36285		559						171							
				TD	020		1592	3617		68	001	433	9 0	352		150							
			08		020		1592	36167 3598		68	001	20.2		4.22		150							
				TD TD	025		1503 1448	3590		574 580		392		423 491		128							
			08		030		1448	35903		80	001	540	, ,	771		118							
			OB		035		1428	35953		88						121							
				TD	040		1353	3577		90	001	278	5 0	622		101							
			08		040		1353	35767	26	90					15	101							
			OB		044		1252	35600		97						072							
			08		045		1289	35692		97		100		7		088							
			0B	T D	050 050		1214	3556 35559	_	701	001	182	6 0	746		069							
			08		055		1085	35381		701 712						069							
				10	060		1042	3536		718	0.01	035	0 0	856		022							
			0.8		060		1042	35359		718	001	0,00	•	0,0		022							
			08		065		0889	35114		724						971							
			08	5	068		0889	35154	2	728					14	977							
				TD	070		0852	3512	27	731	000	910	9 0	954	14	966							
			08		070		0852	35117		731	0.0.					966							
			S 08	TD	080 080		0690	3504 35043		749 749	000	1732	4 1	036		919							
			08		086		0605	35043		749 759						919							
				1D	090		0610	35032		762	000	1606	0 1	103		904							
			08		090		0610	35078		762			- 1	- 00		904							
				TD	100		0524	3502		768	000	545	9 1	160		885							
			08		100		0524	35016		768					14	885							
				T D	110		0489	3502		772	000	1510	6 1	213		888							
			08	5 TO	110 120		0489 0472	35016 3499		772 772	0.20	1521	7 1	2/5		888							
			0B		120		0472	3499		772	000	1521	<i>i</i> 1	265		897							
				TD.	130		0441	3499		775	000	1489	4 1	315		901							
			0.8		130		0441	34987		775		- /	•			901							
				ΤD	140		0424	3498		776	000	485	5 1	364		911							
			08		140		0424	34975		776						911							
				TD	150		0415	3497		777	000	1483	7 1	413		924							
			08	5	150	U	0415	34974	2	777					14	924							

Reference Supplement Supp	NODC STATION NUMBER
31800 EV 4409 0 0 4225 0 149 42 11 09 024 1966 074 4755 15 22 3 2 X2 0 3	
WATER WINO COLOR INANE DEPTH	
COLOR TANNS DIR. FORCE DIR BULB DIR BULB DIR D	0088
DT SD 22 S20 125 194 183 6 29	
MESSHAGE CAST THE DEPTH (m) T \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
STD 0000 1866 3585 2577 0022333 0000 15194 1	
STD 0000 1866 3585 2577 0022333 0000 15194 024 085 0000 1866 35845 2577 0022355 0022 15196 085 0010 1867 3585 2577 0022355 0022 15196 085 0010 1867 3585 2577 15196 002 085 0020 1867 3585 2577 0022390 0045 15198 002 085 0020 1867 3585 2577 0022390 0045 15198 003 1867 3585 2577 0022425 0067 15199 085 0030 1867 3585 2577 0022425 0067 15199 085 0030 1864 3585 2577 0022423 0112 15202 085 0050 1864 35850 2578 15202 085 0050 1864 35850 2578 15202 085 0065 1864 35850 2578 15202 085 0075 1862 3615 2601 020323 0165 15209 085 0075 1862 3615 2601 020323 0165 15209 085 0100 1808 3646 2638 0016869 0212 15201 085 0100 1808 3645 2638 15201 085 0100 1808 3645 2638 15201 085 0106 1790 36565 2651 15198 085 0100 1801 36500 2644 15201 SID 0125 1795 3651 2646 0016213 0253 15202	il O4=St pg + o1/1 pH
024	
STD 0010	1
08S 0010 1867 35850 2577 0022390 0045 15198 002 08S 0020 1867 3585 2577 0022390 0045 15198 002 08S 0020 1867 35850 2577 15199 08S 0030 1867 35850 2577 15199 08S 0030 1867 35850 2577 15199 08S 0050 1864 3585 2578 0022423 0112 15202 08S 0050 1864 35850 2578 15202 08S 0050 1864 35850 2578 15202 08S 0050 1864 35850 2578 15202 08S 0065 1864 35850 2578 15202 08S 0075 1862 3615 2601 0020323 0165 15209 08S 0075 1862 36145 2601 15209 08S 0075 1862 36145 2601 15209 08S 0075 1862 36145 2601 15209 08S 0100 1808 3646 2638 0016869 0212 15201 08S 0100 1808 3646 2638 15201 08S 0100 1808 36455 2638 08S 0106 1790 36565 2651 15198 08S 0106 1790 36565 2651 15198 08S 0106 1795 36515 2646 0016213 0253 15202	
STD 0020	
002 08S 0020 1867 35850 2577 0022425 0067 15199 08S 0030 1867 35850 2577 0022425 0067 15199 STD 0050 1864 35850 2578 0022423 0112 15202 08S 0050 1864 35850 2578 15202 08S 0065 1864 35850 2578 15202 08S 0065 1864 35850 2578 15204 STD 0075 1862 3615 2601 0020323 0165 15209 08S 0075 1862 36145 2601 15209 STD 0100 1808 3646 2638 0016869 0212 15201 08S 0106 1790 36565 2651 15198 08S 0106 1790 36565 2651 15198 08S 0110 1801 36500 2644 15201 STD 0125 1795 36515 2646 0016213 0253 15202	
STD 0030 1867 3585 2577 0022425 0067 15199 OBS 0030 1867 35850 2577 15199 STD 0050 1864 35850 2578 0022423 0112 15202 OBS 0065 1864 35850 2578 15202 OBS 0065 1864 35850 2578 15204 STD 0075 1862 3615 2601 0020323 0165 15209 OBS 0075 1862 36145 2601 15209 15209 STD 0100 1808 3646 2638 0016869 0212 15201 OBS 0100 1808 3645 2638 15201 15201 OBS 0106 1790 36565 2651 15198 OBS 0110 1801 36500 2644 15201 OBS 0125 1795 36515 2646 0016213 <td></td>	
STD 0050 1864 3585 2578 0022423 0112 15202 0BS 0050 1864 35850 2578 15202 0BS 0065 1864 35850 2578 15204 STD 0075 1862 3615 2601 0020323 0165 15209 OBS 0075 1862 36145 2601 15209 15209 STD 0100 1808 3646 2638 0016869 0212 15201 OBS 0100 1808 3645 2638 15201 15201 OBS 0106 1790 36565 2651 15198 15201 OBS 0110 1801 36502 2644 15201 15201 STD 0125 1795 3651 2646 0016213 0253 15202	
OBS 0050 1864 35850 2578 15202 OBS 0065 1864 35850 2578 15204 STD 0075 1862 3615 2601 0020323 0165 15209 OBS 0075 1862 36145 2601 15209 STD 0100 1808 3646 2638 0016869 0212 15201 OBS 0100 1808 3645 2638 0016869 0212 15201 OBS 0100 1808 36455 2638 15201 OBS 0106 1790 36565 2651 15198 OBS 0110 1801 36500 2644 15201 STD 0125 1795 3652 2646 0016213 0253 15202 OBS 0125 1795 36515 2646 15202	
OBS 0065 1864 35850 2578 15204 S1D 0075 1862 3615 2601 0020323 0165 15209 OBS 0075 1862 36145 2601 15209 S1D 0100 1808 3646 2638 0016869 0212 15201 OBS 0100 1808 36455 2638 0016869 0212 15201 OBS 0106 1790 36565 2651 15198 OBS 0110 1801 36500 2644 15201 S1D 0125 1795 36512 2646 0016213 0253 15202 OBS 0125 1795 36515 2646	
STD 0075 1862 3615 2601 0020323 0165 15209 OBS 0075 1862 36145 2601 15209 STD 0100 1808 3646 2638 0016869 0212 15201 OBS 0100 1808 36455 2638 0016869 0212 15201 OBS 0106 1790 36565 2651 15198 OBS 0110 1801 38500 2644 15201 STD 0125 1795 3652 2646 0016213 0253 15202 OBS 0125 1795 36515 2646 15202 15202	
OBS 0075 1862 36145 2601 15209 STD 0100 1808 3646 2638 0016869 0212 15201 OBS 0100 1808 36455 2638 15201 OBS 0106 1790 36565 2651 15198 OBS 0110 1801 36500 2644 15201 STD 0125 1795 3652 2646 0016213 0253 15202 OBS 0125 1795 36515 2646 15202	
STD 0100 1808 3646 2638 0016869 0212 15201 0BS 0100 1808 36455 2638 15201 0BS 0106 1790 36565 2651 15198 0BS 0110 1801 36500 2644 15201 STD 0125 1795 36512 2646 0016213 0253 15202 0BS 0125 1795 36515 2646 15202	
ORS 0106 1790 36565 2651 15198 OBS 0110 1801 36500 2644 15201 SID 0125 1795 3652 2646 0016213 0253 15202 OBS 0125 1795 36515 2646 15202	
OBS 0110 18V1 36500 2644 15201 STD 0125 1795 3652 2646 0016213 0253 15202 OBS 0125 1795 36515 2646 15202	
STD 0125 1795 3652 2646 0016213 0253 15202 0BS 0125 1795 36515 2646 15202	
OBS 0125 1795 36515 2646 15202	
310 0190 1779 9092 2091 0019020 0299 19400	
OBS 0150 1775 36515 2651 15200	
STD 0200 1725 3643 2656 0015479 0372 15193	
085 0200 1725 36425 2656 15193 5TD 0250 1693 3637 2660 0015306 0449 15191	
STD 0300 1641 3629 2666 0014863 0524 15183	
OBS 2300 1641 36290 2666 15183	
STD 0400 1479 3603 2683 0013496 0666 15146	
OBS 0400 1479 36030 2683 15146	
OBS 0470 1419 35915 2687 15136	
STD 0500 1356 3582 2693 0012739 0797 15120 OBS 0500 1356 35820 2693 15120	
0BS 0570 1316 35755 2696 15117	
STD 0600 1259 3566 2700 0012259 3922 15102	
OBS 0600 1259 35655 2700 15102	
STD 0700 1021 3531 2717 0010593 1036 15030	
OBS 0700 1021 35305 2717 15030	
STD 0800 0820 3512 2735 0008793 1133 14970 085 0800 0820 35115 2735 14970	
51D 0900 0600 3491 2750 0007191 1213 14898	
OBS 0900 0600 34905 2750 14898	
910 1000 0528 3495 2762 0006035 1279 1488 6	
085 1000 0528 34945 2762 14886	
STD 1100 0505 3449 2768 0005548 1337 14894 08S 1100 0505 34985 2768 14894	
065 1150 0479 34985 2771 14892	
STD 1200 0479 3499 2771 0005311 1391 14900	
OBS 1200 0479 34985 2771 14900	
STD 1300 0456 3499 2774 0005109 1443 14907	
085 1300 0456 34985 2774 14907	
STD 1400 0448 3500 2775 0005030 1494 14921 085 1400 0448 34995 2775 14921	
51D 1500 0430 3499 2776 0004959 1544 14930	
OBS 1500 0430 34985 2776 14930	

SHIF	P			LE T	MAR	SDEN	TATE	ON TIA	AE NE	AR ,		RIGINA			DEPTH	MAX. DEPTH		WAVE ERVATIONS		WEA-	CLOUD			NODC STATION
COD		LATITUDE	10	NOTION SOUTH	10°			AY HR		AR C	NO.	ST	ATION PABML		BOTTON	S'MPL	L	HGT PEP SI	/	ODE	TYPE AM		1	NUMBER
E 1	, -		-	17 10	149			_		766	-	075		-	. 745	-	1		-	<u> </u>		-	_	2030
ΕV	/ '	43170	N U4	1500W	144	WAT			ND IS		<u> </u>	IR TEM			4755	15	12	2 - 1	ļ	x 2	0 3	1	J	0089
						COLOR	TRANS.		SPEED	BARO+		RY EA	WET.	VIS, CODE	NO. OBS.	SPE	CIAL VATIONS							
						CODE	(m)	DIR.	OR FORCE	(mbs)	BU		BULB	CODE	DEPTHS	OBSERV	VATIONS							
						DT	SD	21	505	135	1	94	183	7	26									
	NC.			[T			-		Π.		VOLUM	. 5	ΛÞ		UND		PO 4-P		A L - F	NO ₇ =N	NO1-N	5104~	
MESSE TIM	AE of	NO.	CARD	DEPTH Imi	ı	*C	5	٠/٠٠	SIGM A	-T	ANOM	LY-X10	, 0	△ D N. M. (10 ³		OCITY	0 p m1/1	µg = 01/1		- 01/1	NO2=N ug = at/l	μg = α1/I	µg - al	
HR 1	/10				-			-					+		-			-	-				-	
			STD	0000	1	765	35.	12	2554	. !	002	4524	. 1	000	1.5	157		1		}			1	1
0	90		085	0000		765		215	2554		002		, ,	•00		157								
			STD	0010		767	35.		2554		002	456	7 0	0.25		160								
			OBS	0010		767		220	2554							160								
			STD	0020		767	35.		2554		002	4564	+ 0	U49		161								
	002		085	0020		767		225	2554					_		161								
			STD	0030		768	35.		2550		002	4620) 0	U 74		163								
			ÜBS STD	003U		.768 .822	35.	225	2554 2 6 00		003	029.	, ,	119		163								
			OBS	0050		822		J05	2600		002	0294		117		191								
			085	0061		1739		880	261							168								
			085	0068		768		055	2618							179								
			STD	0075		725	361		2628		001	7744	+ C	160		168								
			OBS	0075	1	725		J 5 5	2628							168								
			STD	0100		720	36.		2644	+	001	6297	7 0	209		173								
			OBS	0100		720		250	2644							173								
			STD	0125		642	36		2651		001	504:	ن اد	248		153								
			OBS STD	0125 0150		1642 1572	36	190	2658		003	4520		- 85		153								
			085	0150		572		160	2664		001	7020	, ,	-05		134								
			STD	0200		439	35		2679		001	3224	+ 0	354		098								
			OBS	0200	}	439	35	870	2679	9					15	098								
			STD	0250	1	381	35	84	2689	7	001	2398	B 0	418	15	087								
			STD	0300	1	336	35	81	2696	5	001	1888	3 C	479	15	080								
			OBS	0300		336		805	2696							080								
			STD	0400		284	35		270.		001	1568	3 0	596		078								
			OBS	0400		1284		745	270		001	205		300		078								
			STD OBS	0500 0500		1107 1107	35	41 405	2710		001	0952	2 (709		029								
			OBS	0550		1040		345	271							013								
			STD	0600		900	35		2724		000	9639) c	812		1967								
			085	0600		900		125	2724				-	. –		967								
			STD	0700		732	35		274		000	7591) (898		+919								
			OBS	0700		732		070	274							+919								
			STD	0800		598	35		2760		000	6108	3 C	966		1884								
			085	0800)598		030	276		000	E , 20	, ,	0.55		882								
			STD QBS	0900 0900)548)548	35	U20	276		000	5630) 1	025		879 879								
			STD	1000)491	35		277		000	5138	3 1	U 79		872								
			OBS	1000		0491		000	277				- *			+872								
			STD	1100		1460	35		277		000	476	9 1	128		+876								
			085	1100		1460		010	277						14	876								
			STD	1200)456	35		277		000	4858	3 1	177		891								
			085	1200)456		005	277!							891								
			STD	1300		1426	34		2776		000	474	7]	225		895								
			085	1300 1400)426)411		980	2770		000	440) 7 3		1895								
			STD	1400		0411	34	98 975	2771		000	4684	+ 1	272		+905 +905								
			STD	1500		0400	34		2771		000	466	7 1	319		+905 +917								
			210	1200		1400		970	277		000	+00		214	14									

										,							1	_							1
			LATITE	10E		# S S	ARSDEN DU ARE	OITATZ IGI	N TIME MTI	YE	AR				\dashv	TO	DEPTH	DB5	WAVE SERVATIONS	THER	CFOAD			MOITATE	
					1710	-10	_		Y HR.1/1	-		NO.	N	UMBER	_	BDTTOM	S'MPL"S	DIR	HGT PER SEA	CODE	TYPE A MI		- '	NUMBER	
	3 1 8 0 0	A EV	4326	SON	042300W	14					66					4755	15	12	2 2	1 x 2	0 3			0090	1
STO								1				• -			VIS.	I OBS. I	SPEC	JAL							
							CDDE	Im I	FO	RCE	(mbs)	BU	ILB			DEPTHS	ORSEKA	AHUNS							
STD 0000 1759 3544 2573 0022478 0000 15158							DT	SD.	32 50) 5	139	9 1	94			29							,	,	
STD 0000 1759 3544 2573 0022478 0000 15158		MESSENGR TIME 0	CAST	CARD	DEPTH (m)	т °c	5 ./		IGMA-	-1	SPECIFIC	votu	ME S	Δ D.	sou	JND	O 2 mi/l							S
124		HR 1/10		1171		-		-			_			,	103	VELC	JC111		1 10 - 01/1	µg - 01/1	yg = q1/1	μg - αI/I	μg - αt/	1	c
124		1		С Т	2 200	1	1750	354	.	0672		002	276	9 0	000	1 16	1 5 0			1	1				
STO 0010 1760 3544 2573 2575 2580 2		124										002	214	0 0	000										
STD				ST	D 001			354	4 2	2573	ŀ	002	280	5 0	U 2 3										
STD 0020 1801 35670 2580 0022175 0051 15167																									
STD 0030		003	,				-					002	212	5 0	045										
STO OBS OAU OAT STO STO OBS		002										002	217	5 0	067										
STO 0050 1720 3582 2611 0019290 0109 15159																									
OBS OBS												001	0.20	. 0	100										
085 0060 1668 35670 2612 15183 510 0075 1772 3606 2629 017675 015 15167 085 0075 1722 3606 2629 15167 085 0075 1722 3608 2629 15167 510 0100 1625 3608 2653 015419 0196 15142 085 0100 1625 3608 2653 015419 0196 15142 510 0102 1625 3608 2653 015419 0196 15142 510 0125 1561 3604 2665 15126 085 0105 1508 3598 2673 15126 085 0105 1508 3598 2673 15133 085 0100 1433 3590 2673 15133 085 0100 1433 3590 2683 15108 085 0200 1433 3590 2683 1506 085 0200 1433 3595 2683 1506 085 0200 1433 3595 2683 1506 085 0200 1433 3595 2683 1506 085 0300 1299 35690 2699 0011994 0460 15066 085 0300 1299 35690 2699 0011994 0460 15066 085 0400 1188 3553 2704 0011292 076 15043 085 0400 1188 3553 2704 0011292 076 15043 085 0400 1188 3553 2704 0011292 076 15043 085 0400 1167 3538 2715 0010452 085 15015 085 0500 0920 3520 2726 0009455 0784 14976 085 0500 0920 3520 2726 0009455 0784 14976 085 0600 0920 3520 2726 0009455 0784 14976 085 0700 0695 3497 2772 0009457 014876 085 0700 0695 3497 2772 0009457 014876 085 0700 0695 3497 2772 0009457 014876 085 0700 0695 3497 2776 0005643 0942 14882 085 0700 0695 3497 2776 0005645 0742 14882 085 0700 0599 3498 2756 0006453 0942 14884 085 0700 0599 3498 2756 0006453 0942 14884 085 0700 0496 3498 2776 000513 108 14876 085 0700 0496 3498 2776 000513 108 14876 085 0700 0496 3498 2776 000513 108 14876 085 0700 0496 3498 2776 000513 108 14876 085 0700 0496 3498 2776 000513 108 14876 085 0700 0400 3498 2777 000645 12884 085 0700 0400 3498 3797 2778 085 0700 0400 3499 3497 2778 000645 12884 085 0700 0400 3498 2776 000645 12884 085 0700 0400 3498 2776 000645 12884 085 0700 0400 3499 2776 000645 12884 085 0700 0400 3499 3497 2778 000645 12884 085 0700 0400 3499 3779 2778 000645 12884 085 0700 0400 3499 3779 2778 000645 12884 085 0700 0400 3499 3497 2778 000645 1289 14903 000645 1289 14903												001	724	0 0	109										
STD 0075 1722 3006 26,29 00175 15167 STD 0100 1625 36055 26,29 15167 STD 0100 1625 36058 26,53 15142 STO 0125 1561 36040 26,55 15126 STD 0150 1508 35980 26,73 15113 STD 0150 1508 35980 26,73 15113 STD 0200 1433 3590 26,83 15096 STD 0200 1433 3590 26,83 15096 STD 0250 1363 3779 26,89 001239 0399 15080 STD 0300 1299 35690 26,95 011994 0460 15068 STD 0400 1188 3553 2704 011292 076 15043 085 0440 1188 3553 2710 015043 15043 085					006)	1668										-								
OBS 0075 1722 36085 2629 15167 STD 0100 1625 36087 2653 0015419 0196 15142 OBS 0100 1625 36017 2653 0014347 0234 15126 OBS 0125 1561 36040 2665 014347 0244 15126 STD 0150 1508 35980 2673 013722 0269 15113 STD 0200 1433 3590 2663 01239 15096 STD 0200 1433 3590 2683 01239 15096 STD 0250 1363 3579 2689 0012399 3399 15080 STD 0250 1363 3579 2689 0011994 0460 15066 STD 0400 1188 35530 2704 011292 0776 15043 085 0430 1148 35535 2710 15043 15																									
STD 0100 1625 36018 2653 0015419 0196 15142 STD 0100 1625 36017 2653 STD 0125 1561 36014 2665												001	161	5 Q	155										
STO 0125 1561 36044 2665 0014347 0234 15126												001	541	9 0	196										
OBS				OBS			1625	360	75	2653							142								
STD 0150 1508 3598 2673 0013722 0269 15113 15113 1508 3598 2673 15113 15096 1508 3590 2683 0012918 0335 15096												001	434	7 0	234										
OBS												001	372	2 0	269										
STD 0200 1433 3590 2683 0012918 0335 15096 OBS 0200 1433 35895 2683 15096 STD 0250 1363 3579 2689 0012399 0399 15080 STD 0300 1299 3569 2695 0011994 0460 15066 OBS 0300 1299 3550 2695 15006 STD 0400 1188 3553 2704 0011292 076 15043 OBS 0440 1189 3553 2707 15033 OBS 0440 1189 35553 2710 15043 STD 0500 1067 3538 2715 010452 0885 15015 STD 0500 1067 3538 2715 15015 STD 0500 0695 34970 2726 0009455 0784 14976 OBS 0700 0895 34970 2742 0007779 0470 14903 OBS 0700 0895 34970 2742 0007779 0470 14903 OBS 0700 0895 34970 2742 0007779 0470 14903 OBS 0700 0895 34970 2742 0007779 0470 14903 OBS 0700 0895 34970 2746 0006453 0942 14882 STD 0700 0899 34985 2756 STD 0700 0899 34985 2756 STD 0700 0899 34985 2756 STD 0700 0896 34970 2766 STD 1000 0496 34985 2769 STD 1000 0496 34985 2769 STD 1000 0496 34985 2776 OBS 1000 0496 34985 2776 STD 1000 0496 3498 2772 0005013 108 14876 OBS 1000 0496 3498 2776 000464 14876 OBS 1000 0496 3498 2776 0005013 108 14876 OBS 1000 0496 3498 2776 000466 14876 OBS 1000 0499 3497 2776 0004731 1206 14882 OBS 1300 0419 34970 2776 0004731 1206 14882 OBS 1400 0399 3497 2778 0004564 1252 14900 OBS 1400 0399 3497 2778 0004632 1298 14913												001	,, ,	_ 0	-0,										
STD 0250 1363 3579 2689 0012399 0399 15080 STD 0300 1299 35690 2695 0011994 0460 15066 STD 0400 1188 3553 2704 0011292 0576 15043 0BS 0400 1188 35530 2704 15043 15043 0BS 0440 1169 35555 2710 15033 15043 0BS 0440 1169 35555 2710 15043 0BS 0440 1169 35555 2710 15043 0BS 0500 1067 35375 2715 0010452 0685 15015 STD 0600 0920 3520 2726 0009455 0784 14976 STD 0700 0695 34970 2742 0007779 0870 14903 08S 0760 0606 34975 2753 14878 STD 0800<				ST	D 020							001	291	8 0	335										
STD														_											
OBS																									
STD												001	199	4 0	40U										
OBS 0430 1148 35475 2707 15033 OBS 0440 1169 35555 2710 15043 STD 0500 1067 3538 2715 0010452 0685 15015 STD 0500 1067 35375 2715 15015 15015 STD 0600 0920 3520 2726 0009455 0784 14976 STD 0700 0695 3497 2742 0007779 0870 14903 0BS 0700 0695 34970 2742 0007779 0870 14903 0BS 0700 0695 34970 2742 14903 14878 STD 0800 0599 34999 2756 0006453 0942 14882 STD 0900 0541 3501 2766 005609 1002 14876 STD 1000 0496 3499 2769 0005314 1057 14874 OBS 1000 0496 3498 2772 0005013 1108												001	129	2 0	576										
OBS 0440 1169 35955 2710 15043 STD 0500 1067 3538 2715 0010452 0685 15015 OBS 0500 1067 35375 2715 15015 15015 STD 0600 0920 3520 2726 0009455 0784 14976 STD 0700 0695 3497 2742 0007779 0870 14903 OBS 0700 0695 34970 2742 14903 14878 STD 0800 0599 34995 2756 0006453 0942 14882 STD 0800 0599 34985 2756 0005609 1002 14876 STD 0900 0541 3501 2766 0005609 1002 14876 STD 1000 0496 34985 2769 0005314 1057 14874 STD 1100 0459 34988 2772 0005013 <																									
STD 0500 1067 3538 2715 0010452 0685 15015 STD 0600 0920 3520 2726 0009455 0784 14976 OBS 0600 0920 35195 2726 14976 STD 0700 0695 34970 2742 0007779 0870 14903 OBS 0700 0695 34970 2742 0007779 0870 14903 OBS 0760 0606 34955 2753 14878 STD 0800 0599 34998 2756 0006453 0942 14882 OBS 0800 0599 34985 2756 0005609 1002 14876 STD 0900 0541 35010 2766 14876 14876 STD 1000 0496 34985 2776 0005314 1057 14874 OBS 1000 0496 34985 2776 14876 14876																									
OBS												001	145	2 0	685										
OBS 0600 0920 35195 2726 14976 STD 0700 0695 3497 2742 0007779 0870 14903 OBS 0700 0695 34970 2742 0007779 0870 14903 OBS 0760 0606 34955 2753 14878 STD 0800 0599 3499 2756 0006453 0942 14882 STD 0800 0599 34985 2756 0006453 0942 14882 STD 0900 0541 3501 2766 0005609 1002 14876 OBS 0900 0541 35010 2766 14876 STD 1000 0496 3499 2769 0005314 1057 14874 OBS 1000 0496 3498 2772 0005013 1108 14875 OBS 1100 0459 3498 2772 0005013 1108 14875									-			001		_ 0	• 0 5										
STD 0700 0695 3497 2742 0007779 0870 14903 08S 0760 0695 34970 2742 14903 08S 0760 0606 34955 2753 14878 STD 0800 0599 3499 2756 0006453 0942 14882 STD 0900 0541 3501 2766 005609 1002 14876 STD 0900 0541 3501 2766 005609 1002 14876 STD 1000 0496 3499 2769 0005314 1057 14874 OBS 1000 0496 34985 2769 0005013 1108 14874 STD 1100 0459 3498 2772 14875 14875 OBS 1100 0459 34975 2772 14875 14875 STO 1200 0440 3498 2774 0004869 1158 14884 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>000</td><td>945</td><td>5 0</td><td>784</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>												000	945	5 0	784										
08S 0700 0695 34970 2742 14903 08S 0760 0606 34955 2753 14878 STD 0800 0599 3499 2756 0006453 0942 14882 OBS 0800 0599 34985 2756 14886 14882 STD 0900 0541 3501 2766 0005609 1002 14876 STD 1000 0496 3499 2769 0005314 1057 14874 OBS 1000 0496 34985 2769 0005314 1057 14874 STD 1100 0459 3498 2772 0005013 1108 14875 OBS 1100 0459 34975 2772 14875 14875 STO 1200 0440 3498 2774 0004869 1158 14884 OBS 1200 0440 3497 2776 0004731 1206 14892												000	777	0 0	¥ 7 0										
08S 0760 0606 34955 2753 14878 STD 0800 0599 3498 2756 0006453 0942 14882 OBS 0800 0599 34985 2756 14876 14876 STD 0900 0541 35010 2766 0005609 1002 14876 OBS 0900 0541 35010 2766 14876 14876 STD 1000 0496 3499 2769 0005314 1057 14874 OBS 1000 0496 34985 2772 0005013 1108 14875 STD 1100 0459 3498 2772 0005013 1188 14875 OBS 1100 0459 3498 2772 0005013 1188 14875 STO 1200 0440 3498 2774 0004869 1158 14884 OBS 1200 0440 3497 2776 00047631 1206 14892 OBS 1300 0419 34970 2778												000	, , ,	9 0	670										
OBS 0800 0599 34985 2756 14882 STD 0900 0541 3501 2766 0005609 1002 14876 OBS 0900 0541 35010 2766 1002 14876 STD 1000 0496 3499 2769 0005314 1057 14874 OBS 1000 0496 34985 2769 14874 STD 1100 0459 34975 2772 005013 1108 14875 OBS 1100 0459 34975 2772 14875 STO 1200 0440 3498 2774 0004869 1158 14884 OBS 1200 0440 3497 2776 000471 1206 14892 OBS 1300 0419 3497 2776 0004764 1252 14900 OBS 1400 0399 34970 2778 0004632 1298 14913																									
STD 0900 0541 3501 2766 0005609 1002 14876 0BS 0900 0541 35010 2766 14876 STD 1000 0496 3498 2769 0005314 1057 14874 0BS 1000 0496 34985 2769 005013 1108 14874 STD 1100 0459 3498 2772 0005013 1108 14875 OBS 1100 0459 34975 2772 14875 STO 1200 0440 34975 2774 0004869 1158 14884 OBS 1200 0440 34975 2774 0004731 1206 14892 OBS 1300 0419 34970 2776 14892 STO 1400 0399 34970 2778 0004564 1252 14900 OBS 1400 0399 34970 2778 0004632 1298 14913												000	545	3 0	942										
08S 0900 0541 35010 2766 14876 STD 1000 0496 3499 2769 0005314 1057 14874 OBS 1000 0496 34985 2769 14874 STD 1100 0459 3498 2772 0005013 1108 14875 OBS 1100 0459 34975 2772 14875 STO 1200 0440 3498 2774 004869 1158 14884 OBS 1200 0440 34975 2774 14884 STD 1300 0419 34975 2774 0004731 1206 14892 OBS 1300 0419 34970 2776 14892 STD 1300 0399 34970 2778 0004564 1252 14900 OBS 1400 0399 34970 2778 0004632 1298 14913												202	540	0 1	0.00		-								
STD 1000 0496 3499 2769 0005314 1057 14874 0BS 1000 0496 34985 2769 14874 STD 1100 0459 3498 2772 0005013 1108 14875 0BS 1100 0459 34975 2772 14875 STO 1200 0440 3498 2774 0004869 1158 14884 OBS 1200 0440 34975 2774 14884 14884 STD 1300 0419 3497 2776 0004731 1206 14892 OBS 1300 0419 34970 2776 14892 14900 STO 1400 0399 34970 2778 0004564 1252 14900 OBS 1400 0399 34970 2778 0004632 1298 14913												000	960	4 1	002										
STD 1100 0459 3498 2772 0005013 1108 14875 OBS 1100 0459 34975 2772 14875 STO 1200 0440 3498 2774 0004869 1158 14884 OBS 1200 0440 34975 2774 14884 STD 1300 0419 3497 2776 0004731 1206 14892 OBS 1300 0419 34970 2776 14892 STO 1400 0399 34970 2778 0004564 1252 14900 OBS 1400 0399 34970 2778 0004632 1298 14913												000	531	4 1	057										
08S 1100 0459 34975 2772 14875 STO 1200 0440 3498 2774 0004869 1158 14884 OBS 1200 0440 34975 2774 STD 1300 0419 3497 2776 0004731 1206 14892 OBS 1300 0419 34970 2776 14892 STO 1400 0399 34970 2778 14892 STO 1400 0399 34970 2778 14900 OBS 1400 0399 34970 2778 14900 STD 1500 0389 3496 2778 0004632 1298 14913				OBS	100				85 2	769						14	874								
ST0 1200 0440 3498 2774 0004869 1158 14884 OBS 1200 0440 34975 2774 14884 STD 1300 0419 3497 2776 0004731 1206 14892 OBS 1300 0419 34970 2776 14892 ST0 1400 0399 3497 2778 0004564 1252 14900 OBS 1400 0399 34970 2778 0004632 1298 14913												000	501	3 1	108										
OBS 1200 0440 34975 2774 14884 STD 1300 0419 3497 2776 0004731 1206 14892 OBS 1300 0419 34970 2776 14892 STO 1400 0399 34970 2778 0004564 1252 14900 OBS 1400 0399 34970 2778 14900 STD 1500 0389 3496 2778 0004632 1298 14913												000	486	g 1	158										
OBS 1300 0419 34970 2776 14892 STO 1400 0399 3497 2778 0004564 1252 14900 OBS 1400 0399 34970 2778 STD 1500 0389 3496 2778 0004632 1298 14913												000		, 1	ن ر د										
STO 1400 0399 3497 2778 0004564 1252 14900 OBS 1400 0399 34970 2778 14900 STD 1500 0389 3496 2778 0004632 1298 14913												000	473	1 1	206										
OBS 1400 0399 34970 2778 14900 STD 1500 0389 3496 2778 0004632 1298 14913												200	,	, .	26.7										
STD 1500 0389 3496 2778 0004632 1298 14913												000	456	4 1	452										
												000	463	2 1	298										
				OBS	150	0	0389	349	55 2	2 7 78	i					14	913								

REFERENCE			LEI	MARSDEN	STATION TIA	AE T		0	RIGINA	TOR'S		DEPTH	MA		w	AVE	WEA-	CLOUD		No	DDC	
CTRY ID. CODE	LATITU		GITUDE E	SOUARE	(G M T)		YEAR	CRUISE		NOITA	\neg	10 801108	OEPT	:		VATIONS	THER	CODES	ļ	51A	TION	
		1/10	1/10		MO DAY HR			NO.		UMBER	-		3 Mri		_	GT PER SEA	+	TYPE AMT		_	-	
31/8007 EV	4322	ON 04	3100W	149 33 WAT		51 ND	1966	Щ!	O7		_	4755	1	5 2	34 3	3 2	X2	013	ı	1 0	091	
				COLOR		SPEED	- BARO		RY RY	WET	VIS.	NO.	1 carre	PECIAL EVATION	N.S.							
				CODE	Im) Olks	FORCE	{mbs) Bi	1F8	BULB		DEPTHS	0000									
				OT	SD 34	S15	13	2 1	78	161	7	27										
MESSENGR TIME O	CAST	CARD	DEPTH (m)	1 °C	s ./		4A-1	SPECIFIC	VOLUA	AE S	∆ D.	so	UNO	021	m1/1	PO4-P T	OTAL-P	NO2-N	NO3-N	S1 O4 - S1	рΗ	5
HR 1/10	NO.	TYPE	Derin umi	, ,	,	1107	^^-'	ANOMA	4LY-X10	,	103	, AEF	OCITY	07		μg - αF/I	µg - a1/1	ug - a1/1	yg - a1/1	yg - 01/l	,,,	č
	-																					П
1	'	STO	0000	1859	3585	25		002	212	8 0	000		192									
151		OBS	0000	1859	35850	25		0.03	22.4				192									
		STD OBS	0010	1859 1859	3585 35850	25 25		002	216	3 ()	022		5194 5194									
		STD	0020	1859	3585	25		002	219	8 0	044		5195									
002		OBS	0020	1859	35850	25							195									
		STD	0030	1859	3585	25		002	223	3 0	067		197									
		0BS 0BS	0030	1859 1859	35850 35850	25 25							5197 5199									
		STD	0050	1822	3587	25		002	127	2 0	110		5190									
		OBS	0050	1822	35870	25							190									
		STD	0075	1792	3581	25		002	108	3 0	163		185									
		085	0075	1792 1845	35810 3633	25 26		001	866	0 0	213		5185 5210									
		STD	0100	1845	36330	26		001	000	0 0	213		5210									
		STD	0125	1761	3638	26		001	642	7 0	457		5191									
		085	0125	1761	36375	26							5191									
		STD	0150	1735	3643		54	001	554	3 0	296		5188									
		OBS	0150	1735 1669	36425 3634	26	63	201	480	0 0	372		5188 5175									
		STD OBS	0200	1669	36340	26	-	001	400	9 0	212		5175									
		STD	0250	1547	3611		74	001	392	5 0	444		5143									
		STD	0300	1457	3596		82	001	327	7 0	512		5121									
		085 STD	0300	1457 1372	35955 3589		95	001	227	7 0	640		5121 5109									
		OBS	0400	1372	35890		95	001	221	, ,	040		5109									
		085	0470	1291	35755		01						5092									
		OBS	0480	1307	35800	27							5100									
		STO	0500	1300	3580		03	001	179	0 0	760		5101									
		08s 08s	0500 0520	1300 1283	35 7 95 35 7 80		03						5101 5098									
		STD	0600	1041	3536		18	001	036	2 0	871		5022									
		085	0600	1041	35355		18					1 5	5022									
		STO	0700	0860	3516		32	000	895	9 0	968		4969									
		OBS STD	0700	0860 0720	35155 3509		32 48	000	746	D 1	050		4969 4931									
		085	0800	0720	35085		48	000	140	2 1	050		4931									
		STD	0900	0580	3509		67	000	555	2 1	115		4892									
		OBS	0900	0580	35090	27	67					1	4892									
		STO	1000	0524	3512		76	000	473	1 1	166		4887									
		085 STD	1000 1100	0524 0492	35115 3514		76	000	1427	2 1	211		4887 4891									
		OBS	1100	0492	35135		81	000	1427	Z 1	611		4891									
		STD	1200	0471	3513	27	83	000	413	9 1	253		4899									
		085	1200	0471	35130		83						4899									
		STO	1300	0448	3512 35115		85	000	404	9 1	294		4906									
		085 STD	1300 1400	0448	3510		'85 '86	000	391	0 1	334		4906 4910									
		OBS	1400	0419	35095		86	000					4910									
		STD	1500	0407	3510		88	000	384	6 1	373		4922									
		OBS	1500	0407	35095	27	88					1.	4922									

EFERENCE TET ID.	CODE	LATITU		ONGITUOE NOUTON	MARSOEN SQUARE	STATION TO		YEAR	ORIG CRUISE NO.	STATIO		DEPTH TO BOTTOM	OF S'MPL'S		WAVE SERVATIONS	WEA THER COD	CODES	5	S	NOOC TATION TUMBER
318007	EV	4335	1/10 O	43380W		11 09		966		78		4755	3 MrL 3	51R.	HGT PER SE	x 2	TTPE AM			0097
	('		- 1		WAT		INO	BARO	1 479	TEMP. C	1	NO.	نصا		101.1	1	. 1 0 1 2	1	1	007
					COLOR	TRANS DIR.	SPEED	METER (mbs)	QRY	WET	CODE		SPEC OBSERVA	TIONS						
					DT	SD 34	S25	149		_	_	36								
					1	30 34	323	1				-	\vdash				Τ.	Ι.	1	T
	MESSENGE TIME	NO.	TYPE	DEFTH (m)	1 %	s ·/.,	SIGM	A-T	SPECIFIC VO	1107	≨ ∆ 0 DYN. M x 10 ³	. AETO	DCITY	02 ml/1	FO4-P sg - 01/1	101AL-1		NO3-N ug = at/1		pH
	HR 1/10						1			_		+			1		1	 	+	
	i	1	5 T D	0000	1892	3596	257	79	00221	27	0000	15	203		1	1	1	1	I	
	186	5	085	0000	1892	35960	257						203							
			510 085	0010	1893 1893	3596 35960	257 257		00221	187	0022		205							
			STD		1894	3598	258		00221	138	0044		207							
	00	2	085	0020	1894	35975	258		0022.				207							
			STD		1894	3601	258		00219	919	0066		209							
			OBS	0030	1894	36010	258		0021	271	0110		209							
			STE OBS	0050	1873 1873	3603 36025	258 258		00213	211	0110		206							
			STD		1869	3605	259		00212	217	0163		209							
			OBS	0075	1869	36045	259						209							
			STD OBS	0100	1826 1826	3615 36150	261		00199	909	0214		203							
			085	0100	1805	36410	261 263						203							
			085	0115	1821	36480	263						208							
			STD	0125	1801	3649	264	+2	00169	572	0259	15	203							
			085	0125	1801	36485	264						203							
			\$10 08s	0150 0150	1779 1779	3650 36495	264 264		00160	165	0300		201							
			STD		1703	3641	266		0015	116	0378		186							
			085	0200	1703	36405	266		0017				186							
			STD		1660	3635	266		00146	96	0452		181							
			OBS	0260	1640	36315	266		00136	250	0 = 27		176							
			STD 085	0300	1523 1523	3606 36055	267 261		0013	778	0 > 2 4		143							
			085	0340	1421	35865	268						115							
			STO		1383	3592	269		0012	320	0655		113							
			OBS	0400	1383	35915	269	95					113							
			085	0465	1289	35735	269						090							
			085	0476	1308 1156	35785 3538	270 269		00120	772	0777		099							
			STE	0500	1156	35375	269		00121	313	017		046							
			085	0560	0990	35220	27						995							
			085	0580	1006	35275	27	18				15	005							
			STO		0907	3510	272		0009	973	0587		969							
			0B\$ 0B\$	0600 0620	0907 0841	35095 35055	272						+969 +947							
			085	0677	0823	35110	273						951							
			OBS	0690	0707	34930	27						906							
			STD		0718	3498	27:		0008	080	0978		912							
			085	0700	0718	34975	271						912							
			0BS 0BS	0765 0785	0746 0689	35250 35150	275						•938 •917							
			STE		0702	3516	275		00066	579	105		925							
			085	0800	0702	35155	275	56				14	925							
			STD		0545	3502	276		0005	590	1111		877							
			08S ST3	2900 1000	0545 0494	35020 3499	276 276		0005	788	116		877 673							
			085	1000		3+985			0000	200	1+0		873							
			STE	1100	0479	3502	27	73	0004	981	1219	9 14	884							
			OBS	1100	0479	35015							884							
			510		0456	3500	27		0004	934	1468		+891							
			08S \$T0	1200	0456 0439	34995 3499			0004	8 // =	131		+891 •900							
			085	1300	3439	3499	27		0004	U 4 0	TOT		+900							
			STE		3420	3499	27		0034	729	1365		•909							
			085	1400	0420	34985						14	+909							
			ST	1500	0401	3498	27	79	0004	644	1412		+918							
			085	1500	0401	34975	27	79				14	918							

REFERENCE						MARSDEN	STATION	TIME			0	RIGINA	ATOR'S		DEPTH	MAX.		WAVE		WEA-	CLOUD	T		NODC	1
CTRY ID. CODE	LATITU)	LONGITU		NOCT	SQUARE	{GM	')	i	EAR.	CRUISE NO.		TATION		TO BOTTOA	DEPTH		SERVATION		THER	CODE			STATION NUMBER	
COOL NO.		1/10		1/10	-		MO DAY	HR.17		966	NO.	07		-	4755	3 M FL 3		HGT PER	SEA		TYPE AN		+-		┥
31 8007 EV	4345	inia 1	04426	00 41	- 1	WAT		WING			T A	IR TEN		1	NO,	1	02	5 3 		X 2	013	1	- 1	009	3
						COLOR	TRANS. DI	. 50	EED OR	METER	≀ 0	RY	WET	CODE	OBS.	SPEC	A TIONS								
						CODE	(m)	FC	DR DRCE	(mbs)	_	LB BJ	80LB	,		1									
						DT	SD 0	213	25	191	2 1	39	133	6	38				_		_			T	
MESSENGR TIME	CAST	CARD		EPTH (m	13	T *C	s ·/		SIGMA	Y-Y	SPECIFIC	VOLU!	ME DY	Δ D N. M.		OCITY	02 m1/1	POP		01AL-P	NO2-N ug • a1/l	NO3-N µg - at/l	S1 O ₄ ='		Š
HR 1/10	-		-		-			-		-				100					+					-	
) S1	n (0000)	1744	3498		254	1	002	578	5 O	000	1	5148		ŀ	-			I		ı	1 5
221	1	089		0000		1744	3497		254					- 0 •		5148									
		51		0010		1744	3498		254		002	581	8 0	026		5150									
		Q83		0010 0020		1744 1759	3497 3498		254 253		002	619	6 0	052		5150 5156									
002	2	089		0020		1759	3497		253		002					5156									
		089		0029		1761	3499		253							5158									
		S1 089		0030 0030		1780 1780	3506 3505		253 253		002	613	5 0	∪78		5165 5165									
		51		0050		1868	3560		255 255		002	436	9 0	128		5200									
		089	. (0050		1868	3559		255							5200									
		083		0055		1887	3572		256		00-	120	2 ^	101		5207									
		S1 089		0079 0079		1825 1825	3588 3587		259 259		002	139	0 د	186		5195 5195									
		083		0090		1819	3618		261							5199									
		S1		0100		1620	3596		264		001	618	1 0	233		5139									
		085 51		0100 0125		1620 1599	3595 3606		264 265		001	5.06	o 0	272		5139 5138									
		089		0125		1599	3605		265		001	200	, ,	- 12		5138									
		51	D (0150		1480	3591		267	3	001	364	0 0	308	1	5103									
		089		0150		1480	3591 3543		267		001	1 40		271		5103									
		S1 089		0200 0200		1208 1208	3543		269 269		001	109	0 0	371		5016 5016									
		S1		0250		1099	3530		270		001	098	7 0	429		4984									
		089		0260		1049	3520		270							4967									
		089		028(029(0921 0997	3495 3525		270 271							4920 4954									
		51	-	0300		0946	3506		271		001	029	9 0	482		4934									
		089		0300		0946	3505	5	271	1						4934									
		059		0308		0960	3525 3515		272							4943									
		0B9		031. 032:		0902 0915	3520		272 272							4921 4928									
		08		037		0800	3499		272							4890									
		S.		0400		0793	3506		273		000	806	2 0	574		4893									
		0B9		0400		0793 0694	3506 3495		273 274							4893 4857									
		089		044		0719	3505		274							4871									
		089		0469		0630	3490		274						1	4838									
		089		0479 050		0680 0638	3505 3499	0	275 275		000	656	3 0	647		4861									
		0B:		0500		0638	3499	5	275		000	٥٥٥	, U	647		4848 4848									
		08	5	057	3	0490	3487		276	1					1	4800									
		S		0600		0499	3490	5	276		000	555	7 0	707		4807									
		0B:		0500		0499 0480	3489 3495)	276 276		000	502	9 0	760		4807 4817									
		089		070		0480	3495	0	276			_		. 50		4817									
		S	D O	080		0466	3499		277	2	000	470	7 J	809	1	4828									
		08:		080		0466	3498	5	277		000	, , , , <u>, , , , , , , , , , , , , , , </u>	2 0	v c .		4828									
		08:		090		0453 0453	3499 3498	5	277		000	+00	2 0	856		4839 4839									
		S	r D	1000	С	0440	3499		277	5	000	459	3 0	902	1	4851									
		08:		1000		0440	3498		277		000	1.5.	, ~	۵,		4851									
		08:		1100		0420 0420	3498 3497		277		000	451	4 0	948		4859 4859									
		S	rD	120	С	0435	3500		277		000	462	0 0	993		4882									
		08:		120		0435	3500		277		0.0-		, .			4882									
		08		130		0400	3499 3498		278 278		000	437	5 l	038		4884 4884									
		5		140		0369	3499		278		000	432	4 1	082		4896									
		08	5	140	3	0389	3498	5	278	1					1	4896									
		5°		150		0378 0378	3498 3498		278		000	430	6 1	125		4908 4908									
		00	3	100	_	0310	2470	0	218	1					1	7900									

									_	11171	<i>1</i> 11 1	. v .— C	OH	/111u	cu										
REFERENCE	SHIP	Τ.			- 2	MAR	SDEN	STAT	ION TI	M.E	YEAR	ORIGIN			DEPTH TO	MAX		WAVE	,	WEA- THER	CLOUD			NODC	
ODE NO.	CODE	_	ATITUDE 1/10	_	NGITUDE TOO	10*	1-	MO I	DAY H	_		NO. 1	OITATIO BB M U P	R	BOTTON	3 1411 6	S DIR.	HGT PER		CODE	TYPE AMI			NUMBER	R
31800	7 EV	4	3530N	04	5080W	149				024	1966				4641	1 15	01	3 4		x 2	0 3	}	}	009	4
							COLOR	TER TRANS.	-	SPEED	BARC METE	A IR TE	MP. C		NO. 085,	SP	ECIAL VATIONS								
							CODE	lm l	DIK.	FORC	(mbs	1) 8ULB	BUL	\rightarrow	OBS. DEPTHS	3									
						_	DT	SD	34	525	19	3 133	11		29			L,					_	-	_
	MESSER	E 0 1	NO. T	RD PE	DEPTH (m)	1	*C	s	٠/	SIG	MA-T	SPECIFIC VOLU	ME .	₹ ∆ D DYN. M x 10 ³	. SO	OCITY	02 ml/	PO4-P		01A L-P	NO2-N µg - al/l	NO ₃ -N	\$1 O4~		+
	HR 1/	10	-							-			+	X 10-	+		_	-	+						-
		Į		STD	0000		587	34			12	002848	9	0000		5090		1	,	1	1		1	'	
	0	24	0.6		0000		587		125		12	003877	. 1	0. 20		5090 5093									
				5TD 3S	0010		.591 .591	34	120		11	002864	+ 1	0 0 2 9		5093									
				STD	0020		591	34			11	002867	7.1	0057		5095									
	J	0.2		35	0020		591	34	120		11					5095									
				35	0025		596		120		10					5097									
				STD	0030		.601	34			11	002873	35	0086		5100 5100									
				35 35	0030 0044		.601		145 755		30					5145									
				5 T D	0050		.660		85		51	002499	91	0140		5130									
				35	305u	1	.660	34	845		51					5130									
				5 T D	0075		.28∪	35			62	001445	9	0189		5017									
				35 35	0075 0082		1280		220		62					5017 4987									
				25 STD	0100		1285		49		82	001467	79	0223		5026									
				35	0100		285		485		82					5026									
			0	35	0110	1	299	35	525	26	82					5033									
				STD	0125		245		48		89	001202	2 2	0254		5017									
				35	0125		1245	_	480		89	00116	7 7	0.203		5017									
				STD BS	0150 0150		1204 1204		45 445		95	00115	/ /	0483		5006 5006									
				5 T D	0200		1120		36		703	00108	36	0339		4984									
				35	0200		1120		355		703					4984									
				STD	0250		1031	35	29	2.	714	00098	79	0391	1	4960									
				STD	0300		945		22		724	00090	57	0438		4936									
				35	0300		945		220		724	00074		0533		4936									
				STD BS	0400 0400)786)786		080		738 738	00078	IJ	0523		4891 4891									
				B S	0470		709		120		752					4873									
				STD	0500		0635		Ú4		756	00061	5.2	0593	3 1	4848									
				35	0500		0635		V35		756					4848									
				BS	0515		0589		985		758	0.3067	, -	0051		4831 4831									
				STD BS	0600 0600		0553 0553		000		763 763	000546	5 2	005		4831									
				STD	0700		0509		00		769	00050.	2.2	0703		4829									
				Bs	0700		0509		000		769					4829									
				STD	0800		3473		00		773	00046	84	0752		4831									
				BS	0800		0473		000		773	300.5	2.0	0.700		4831									
				STD Bs	0900 0900		0455 0455		01	_	775 775	00045	5 U	0798		4840 4840									
				STD.	1000		0440 0440		5J1		777	00044	46	084		4851									
				Bs	1000		044Ū		005		777				1	4851									
				STD	1100		0421		99		778	00044	17	088		4859									
				BS	1100		0421		1990		778	0.007.3	7 3	043		4859									
				STD	1200		0410		+99 . aan		779 779	00043	13	093.		4872 4872									
				BS STD	1200 1300		0410 0387		+990 +99		781	00042	10	097		4879									
				51U 85	1300		0387		985		781	00072		0 / / .		4879									
				STD	1400		0380		99		782	00042	09	101		4892									
				BS	1400		0380	34	985	2	782					4892									
				STD	1500		0378		99		782	00042	69	105		4908									
			0	BS	1500		0378	34	+985	- 2	782				1	4908									

	SHIP	LATITUE	DE LOP	NGITUDE NOCE	MARSDEN SOU ARE		TION TI	Y	EAR	CRUI	ORIGIN.	ATOR'S TATION TUMBER	\neg	DEPTH TO BOTTO	Dirii	OBS	WAVE ERVATIONS	WEA THEI COD	CODE	S		NODC STATION NUMBER	1
-	EV	4400		5500W	149 4	-	10 (966		08		1	438	-			X a				009	5
0 0 1	- 1				-	WATER		VIND	BARC	1	AIR TEA		T 1	NO.	7		1 - 1 1			1	'		-1
					col	OR TRAN	+	SPEED	METE	R	ORY	WET	CODE	OBS.	OBCERT	ECIAL VATIONS							
					co			FORCE	Imbs	_	BULB	BULB	_		1								
					D	T 50	01	525	22	1	122	106	8	37	1			,		_			
A	MESSENGR TIME O	CAST	CARD	DEPTH (m)	r to	,	٠/	SIGMA	T	SPECI	FIC VOLU	ME ₹	△ D		ONUC	O2 ml/l	PO4-P	TOTAL-					4
,	HR 1/10	NO.	TYPE	DEF171 07	'		•••	3.0	` '	ANC	MALY-X1		(10 ³	VE	LOCITY		μg - a1/l	₽9 - 01/	ug - a1/1	yg - ot/	1 µg - a	HZ1	
								1															
- 1		1 1	STD	0000	146	8 33	74	250	9	0.0	2880	9 0	000	1	5048		1		•	'			
	056		OBS	0000	146		740	250							5048								
			STD	0010	146		74	250		0.0	2885	7 0	029		5050								
			OBS	0010	146		740	250		0.0	7000		250		5050								
	00-	1	STD	0020	146 146		740	250 250		00	2888	5 (058		5052 5052								
	002		OBS OBS	0025	146		740	250							5053								
			STD	0030	146		74	250		0.0	2891	3 0	087		5053								
			OBS	0030	146		740	250		0.0	,	- 0			5053								
			OBS	0039	150		140	253							5073								
			OBS	0046	140		800	252						1	5034								
			OBS	0049	150		750	257	8						5081								
			STD	0050	148		95	259		0.0	2053	6 0	136		5078								
			OBS	0050	148		950	259						1	5078								
			OB5	0052	142		30P	256															
			OB S	0055	153		65P	264															
			OBS OBS	9058 9066	133 116		10P	256 261															
			OBS	0068	118		00P	266															
			OBS	0072	110		60P	264															
			STD	0075	114		12	268		0.0	1268	6 0	178	1	4969								
			OBS	0075	114		120	268							4969								
			085	0080	112		950	267							4962								
			STD	0100	125		39	268		0.0	1282	2 0	209	1	5014								
			OBS	0100	125	4 3	385	268	0					1	5014								
			OBS	0106	125		350	267							5014								
			OBS	0114	116		125	267							4984								
			STO	0125	125		53	269		0.0	1175	0 (240		5019								
			085	0125	125		530	269		0.0					5019 5010								
			STD	015U 015U	121		46 460	269 269		U)1167	1 (269		5010								
			STO	0200	112		36	270		0.0	1087	, (326		4985								
			OBS	0200	112		355	270		0 (,100,		220		4985								
			STD	0250	105		28	271		0.0	01031	2 0	379		4967								
			STD	0300	095	9 3	21	272	0.0	0.0	0940	7 (428	1	4941								
			OBS	0300	095		205	272							4941								
			STD	0400	070		502	274		00	0702	1 (510		4857								
			OBS	0400	070		020	274							4857								
			OBS	0418	066		970	274							4847								
			OBS	0429	070		105	275					L		4862								
			STD	0500 0500	060		503	276		0 (00573	5 5 (1574		4834								
			OBS STD	0600	060		5030 504	27 <i>6</i> 27 <i>6</i>		0.0	00498	in r	1628		4834 4826								
			OBS	0600	05.		5040			0 (,∪→ ,≿	, , (, 5 2 0		4826								
			STD	0700	049		503	27		0.0	00466	2 (676		4825								
			OBS	0700	049		5030					- `	- , 0		4825								
			STD	0080	046		503	27		0 (00438	37 (721		4829								
			OBS	0800	046		5030								4829								
			STD	0900	044		03	27		0 (00419	95 (764		4836								
			OBS	0900	044		5030								4836								
			STD	1000	04		503	278		0 (00407	13 (1805		4845								
			OBS STD	1000	04		5030 502	278 278		0.0	00404	. 5 .	846		4845 4853								
			OBS	1100	040		502 5015			0 (,0404	• > (046		4853								
			STD	1200	040		503	278		0.0	00406	6 (886		4872								
			OBS	1200	04		5030					- \			4872								
			STD	1300	039		503	278		0 (00405	66 0	927		4884								
			0B5	1300	039		5025								4884								
			STD		039		503	278		0 (00407	70 (968		4898								
			OBS	1400	0.34		5025	278							4898								

$\frac{1}{2}$		HIP 3OE	LA	TITUOE	LO	NGITU OF THE	MARSI	RE	STATION TIME	YEAR		STATE	DN	DEP TO BOTT	O OF	OBSI	WAVE ERVATIONS	TH	EA- IER ODE	CLOUD	1	ST	NODC FATION UMBER
4	<u> </u>	-	-	1/10	-	1/10	10*		MO DAY HR		1	NUM	· · ·	_	3 7417		HGT PER SE		-	TYPE AM		_	
1		V	44	090N	1 04	6310W	149	46 WAT		97 1966		B 2		39		02	2 2	X	(2	0 3	1		009
										SPEED MET		W.	VIS.	NC OB	. SPE	CIAL							
							ľ	CODE	TRANS. DIR.	FORCE (mb		BU		DEP	THS CREEK	ZATIONS							
								DT	50 04	520 25	4 094	0	78 7	3	7								
ſ,	ME:	SENGE	Τ.,	., .	RD		Τ.		T		SECIEIC VOIL	LIAME	₹ A D OYN. M.	T	CNUOZ		PO4-P	TOTAL	_e	NO2-N	NO3-N	5104-51	
I.		SSENGE TIME 1/10	Ϋ́N	O. 1	rPE	OEPTH Imi	ı	*C	s ./	SIGMA-T	SPECIFIC VOL	107	X 10 ³		VELOCITY	Q2 ml/l	νg • α1/1	ם - פע	171	υφ - ο1/L	μg - αt/l	ug - a1/l	pН
ľ	-	17 10	+			-	-							+				_	\neg				
,			ļ		STD	0000	1	360	3343	2508	002891	32 ′	0000		15009		t	1	'	'		•	,
		09	7		35	0000		360	33430	2508					15009								
					STD	0010		360	3342	2507	00290	31	0029		15011								
					35	0010		360	33420	2507					15011								
		00	2	0	STD	0020		360	3343	2507	00290	20	0058		15012								
		00	_		3s 3s	0020 0025		360 451	33425 33655	2507 2506					15012 15046								
					STD	0030		473	3390	2520	002786	60	0086		15057								
					35	0030		473	33895	2520	002.0		0.00		15057								
					35	0033		493	34105	2532					15066								
					STO	0050		160	3404	2593	00208	95	0135		14957								
					35	0050		160	34035	2593					14957								
					35	0061		823	34020 35040	2649					14835								
					35 35	0066 0071		0 73 027	35040	2687 2688					14941								
					5 T D	0071		110	3514	2689	00119	39	0176		14957								
					35	0075		110	35140	2689	0011	-	0 - 10		14957								
					35	0079	1	024	34945	2689					14925								
					STD	0100		147	3535	2698	00111	10	0205		14977								
					35	0100		147	35350	2698					14977								
					BS	0108 0125		169	35365 3526	2695	00112	2.0	0233		14986								
					STD 35	0125		113 113	35260	2697 2697	00112	24	0233		14968								
					STD	0150		027	3513	2702	00108	00	0261		14940								
					35	0150		027	35125	2702					14940								
				0	35	0161		992	35115	2707					14929								
					BS_	0180		070	35265	2705					14962								
					STD	0200		906	3504	2716	00095	64	0311		14903								
					BS STD	0200 0250		906 809	35040 3507	2716 2733	00079	Q /.	0355		14903								
					BS	0260		789	35070	2737	00019	04	0255		14869								
					BS	0270		812	35130	2738					14880								
					STD	0300		780	3511	2741	00073	58	0394	+	14872								
				0	BS	0300		780	35105	2741					14872								
					STO	0400		631	3506	2758	00058	03	0459	9	14830								
					BS	0400		631	35055	2758					14830								
					BS STD	0450 0500		570 566	35040 3506	2764 2766	00050	0.1	0514		14813								
					BS	0500		566	35055	2766	00000	, x	0 - 1 -	•	14820								
					STD	0600		496	3505	2774	00043	71	0561	1	14808								
					B S	0600	0	496	35050	2774					14808								
				0	85	0640		495	35045	2774					14814								
					BS	0650		517	35115	2777	00011	1.3	0.00		14826								
					STD BS	0700 0700		490 490	3505 35050	2775 2775	00044	1.5	0605	,	14822								
					550 STO	0800		490 450	35050	2779	00040	29	0647	7	14822								
					85	0800		450	35050	2779					14822								
					STO	0900		427	3505	2781	8 0000	87	0087	7	14825								
					BS_	090ú		427	35045	2781		_			14829								
					STD	1000		410	3501	2781	00040	36	0727	ï	14838								
					BS CTO	1000		410	3504P	2783P	00063	L. C.	0769	2	14855								
					STD BS	1100 1100		411 411	3498 3504P	2778 2783P	00043	09	0107	7	14000								
					850 850	1200		378	35048	2783P	00041	56	0611	1	14858								
					310 BS	1200		378	34965	2780	000-1	, ,	0 ~ 1 1	-	14858								
					STD	1300		376	3497	2780	00042	18	0053	3	14874								
				0	BS	1300	0	376	34965	2780					14874								
					STO	1400		372	3497	2781	00042	16	0895	5	14889								
					B5	1400		372	3497J	2781					14859								
				0	BS	1480	0	368	34965	2781					14901								

CTOV CODE	ID. NO.	SHIP	LATITUDE 1/10	LONGITUDE 1/10	DRIFT	MARSI SQUA	DEN RE	STA	IGM.		YEAR	CRUISE NO.	STATION NUMBER	DEPTH TO BOTTOM	MAX, DEPTH OF S'MPL'S	O8	W A SERV		NS SEA	WEA- THER CODE		DES	NODC STATION NUMBER
3 1	آناوه	EV	4416 N	14712 A		149	→ 7	11	15	142	1966		UB3	4023	15	35	2	-		Х1	Ġ	7	0097

				1	217 2	4 100 0	1011	14								
MESSENGE CAST TIME OF NO HR 1/10	CARD TYPE	DEPTH (m)	τ " C	s *4.	SIGMA=T	SPECIFIC VOLUME ANOMALY-X107	∑ △ D DYN. M. x 10 ³	SOUND VELOCITY	02 ml/l	PO4-P yg - ot/1	FOTAL=P ug = ot/l	NO2=N µg = a1/1	NO3-N µg - 01/1	\$1 O a \$1 ug - at/1	рН	500
	STD	3000	1314	3343	2517	0028064	0000	14994		1	1	1				
142	085	0000	1314	33428	2517			14994								
	STD	0010	1316	3144	2517	0028068	0028	14996								
142	OBS	0010	1316	33456	2517			14990								
	SID	0020	1249	3393	2568	0023207	JJ54	14981								
142	JBS	0026	15090	34131	25300											
	SID	0030	1184	3413	2597	0020547	Ju 76	14963								
	SID	0050	1055	3415	2621	0018245	0114	14921								
142	085	0051	1049	34150	2622			14919								
	SID	0075	0871	3435	2670	0013664	0154	14850								
	STD	0100	0744	3450	2703	0010541	0105	14818								
142	085	0103	0733	34582	2706			14815								
	STO	0125	0705	3465	2715	0009306	0239	14809								
	SID	0150	Ü675	3473	2726	0005424	0231	14802								
142	OBS	0153	0672	34742	2727			14801								
	SID	0200	Ü63J	3482	2739	0007242	0271	14793								
142	085	0235	06020		2743 2											
	STD	0250	0591	3488	2749	0006370	03.5	14787								
	STD	0300	3555	3493	2756	0005617	0235	14781								
142	QBS	0308	0550	34934	2758	0000011	0-22	14780								
	SID	0400	0498	3494	2765	0004991	0388	14774								
142	QBS	T0437	0482	3494Ü	2767			14774								
	STD	0500	0400	3494	2769	0004704	0+36	14778								
	STD	0600	0440	3494	2771	0004554	0482	14786								
142	085	10615	0443	34944	2772	000		14707								
	STD	0700	0434	3495	2773	0004472	0526	14798								
	STD	0000	0422	3495	2774	3004435	0572	14809								
142	OBS	0823	U419	34954	2775	• • • • • • • • • • • • • • • • • • • •	. , .	14811								
	STD	0900	0402	3494	2776	0004346	0616	14817								
	STD	1000	0387	3493	2776	0004376	0560	14828								
142	OBS	T1026	0364	34922	2776	000.510	0 + 0 0	14631								
	SID	1100	0361	3492	2777	0034+07	0754	14842								
	STD	1200	0377	3493	2777	6004431	0748	14857								
142	085	1232	0376	34927	2777	0004401	0140	14862								
1 + -	STD	1300	0374	3493	2778	0004450	3792	14872								
	STD	1400	0371	3493	2775	0004490	0837	14888								
	STO	1500	0368	34 73	2775	0004542	0487	14904								
142	QBS	T1540	0367	34930	2773	0001242	0002	14910								
4 - 4 2	903	11340	0.507	34930	2114			14910								

10.	SHIP		ì		_ ≃	MAR	SDEN	STAT1	IT_NC	ME			ORIGINA	TOP*5		DEPTH	MAX. DEPTH		WAVE		WEA-	CLOUD			NODĆ TATION
NO.	CODE	LATITU	DE 1/10	LONGITU	DE JOON	10*			MTI AY JHI	2 1/10	YEAP	CRUIS NO	E 51	A TION J M BER		TO BOTTOM	OF S'MPL*	0	HGT PER	- 1	THER CODE	CODES		2	TATION
8007	ΕV	4420		0473.	-	149			-		1966		084			3840	15	1	1		x1	0 3			0098
			,				WAT	ER	w	IN O	BARC)- L	AIR TEM		- VIII	NO.		CIAL	1-1-1	,		0.3			00,0
							COLOR	TRANS.	DIR.	SPEED OR FORCE	M ETE		DRY	W ET BULB	CODE	D85. DEPTHS		2 MOIT A							
							DΤ	SD	35	508	27	4	122	094	7	29									
	MESSENGE	CAST	CARC	0 0	91H (m)	,	*c	2		CIC A	AA-T	SPECIF	IC VOLUM	E 2	A D	sou		0 2 ml/	PO4-P	TO	TA L-P	NO2-N	NO3-N	51 04-5	не
[TIME d	NO.	TYPE	: 5	FIN (m)			,		316 A	nA-1	ANO	MALY-XTO	,	x 10 ³	VELC	CITY	U 2 m1/	μg = 01/	פע ו		νg - al/l	ا⁄اه - ولا	µg - al/	
	167	,	S1 085		0000		382 382	335		25 25		00	28260) (100		J18 018								
	107		51		0010		362	335		25		0.0	28286		028		020								
			085		0010		382	335		25		• •					020								
			ST		0500	1	382	335	8	25	15	00	2831:	3 (057		322								
	002	2	035)U2Ú		382	335		25							022								
			089		0025		383	335		25		0.5	2022				023								
			ST 089		0030		383	335		25 25		00	2832.	<u> </u>	0085		024 024								
			085		0040		385	335		25							026								
			51		0050		155	335		25		00	J419!	5 (137		949								
			085	5 (0050	1	155	339	75	25							945								
			085		068		651	34		26							772								
			ST		0075		700	344		27		0.0	1049	9 (181		796								
			085		0075		1700	344		27		0.0	0.4		0.5		796								
			S1 085)100)100		688	346		27 27		00	0001) (05		798 798								
			51		125		1694	348		27		0.0	0785	7 (0226		807								
			089		125		1694	348		27		•	0.05	, ,	20		807								
			089	5 (130	C	707	348	370	27	3.3					14	813								
			ST		150		1684	349		27		00	0724.	2 (445	14	808								
			089		150		684	349		27							808								
			OBS	_	180		1639	348		27							794								
			0B5		0189 0200		1663 1620	349		27	48 48	0.0	0644		1279		807 790								
			089)200)200		162U	349		27		00	0044	• (1217		790								
			51		J250		1584	349		27		υŭ	U583	5 (0310		785								
			51		300		548	349		2.7			0534		37		779								
			085	5	300	C	548	349	955	27	60					14	779								
			51	T D	00040	C	474	349	4	2.7	68	0.0	0473	1 (388	14	764								
			089)4UÚ		1474	349		2.7							764								
			51		0500		456	34		27		00	0448	3 () 4 3 4		774								
			0BS)50U)6U0)456)450	34°		27 27		0.0	0422	2 /	0477		774								
			0B9		3600		1450	349		27		00	10422) ()411		768								
			51		0700		1437	35			77	0.0	0410	0 (0519		800								
			089		0703		1437		105		77						800								
			51	10	0000		423	35	Ü	2.7	78	0.0	10407	1 (0260	14	810								
			085		0800		1423		000		78						810								
			S1		0900		409	35			80	00	10400	1 (0600		821								
			OBS		0000		1409		000		80			7	36		821								
			S1 0B9		1000 1000)396)396	34	99 990		80 80	0.0	10401	۷ ۱	3640		832								
					1100		3391	34			81	0.0	0406	5 1	0081		847								
			0 B S		1100		391		987		81			- '			847								
			5	TD	1200		378	34			81	0.0	10400	1	0721		858								
			0 B S	S	1200		378		78		81						858								
			51		1300		373	34			9 -	0.0	0410	7 (762		875								
			039		1300		373		75		82	_					873								
			51		1400		368	34			82	0.0	00411	4 (0803		887								
			085		1400		368		977		82	0.0	0612	0	0845		887 904								
			51 089		1500 1500)367)367	34	78 982	27	83	UC	0414	4 (1045		904								

NCE ID.	SHIP	LATITU	JDE	LON	GITUDE SUNT	MARS	DEN ARE	STAT	ON T	IME	YEAR	CRUI	ORIGIN	STAT			EPTH TO	MAX.	08	WAVE SERVATIO	NS	WEA	CODES			STA	DC
ID. NO.	CODE		1/10	201	1/10	10"		MOT	AY	HR,1/10		NO		NUN		801	пом	S'MPL"		HGT PER		COOL		1		NU	MBER
007	EV	442	30N	04	7540W	149	47	11	10	185	1966	5	0.8	3 5		35	592	15	35	2 2		X1	0 3			0	099
			J		1 1	1	WAT	ER	1	WIND	BAR	, T	AIR TE	MP.		N	10.		4	' ' '		1		•		,	
							COLOR	TRANS.	DIR.	OPEEO OR FORCE	MET	ER	DRY		/ET CO	2. 0	as.	OBSERV	CIAL /ATIONS								
						į	CODE	16.1			(mb		BULB		OF8	lot.	PTHS										
							DT	SD	35	506	2 9	95	122	0	92 7	' []	31										
	MESSENGR TIME	CAST	CA		DEPTH (m)	Т	"c	s	٠/	SIGA	4 A - T	SPECI	FIC VOLU	JME	₹ △ OYN.	D. М.	sou		02 ml/	PO4-	P t	OTAL-P	NO2-N	NO3-N			ρН
	HR 1/10		TYI	PE								ANG	MALT-X	10-	x 10	3	VELC	CITY		اه - وبر	/1 /	µg + ol/l	μg − at/l	μg - σ1/l	h8 -	91/1	
				TD	0000		400	33			10	0.0	2872	25	000	0		024									
	189	5	06	TD	0000		400	33	565		10 10	0.0	2878		002	0.0		024 026									
			08		0010		400		560			00	12010	00	002	. 7		026									
				TD	0020		400	33			10	0.0	2801	14	005	5.5		027									
	00;	2	OB		0020		400		560		10	0.0						027									
		_	0.8		0025		402		575									029									
				TD	0030	1	447	33	71	25	11	0.0	2872	2 1	008	86	15	046									
			QВ		0030		447		705									046									
			0.8		0040		724		205		63							152									
				TD	0050		919	34			40	0.0	1648	3 8	013	52		871									
			08 08		0056 0064		1645		200 500		10							755 777									
			08		0067		1655		500 500									777									
				TD	0075		1696	34			13	0.0	00955	5 3	016	. 4		796									
			08		0075		1076		600		13							796									
			ОВ		0080		718		675		16							846									
				TD	0100		695	34			21	0.0	0887	7.2	018	3 7	14	801									
			08	15	0100		595		695									801									
				TD	0125		1724	34			25	0.0	00848	36	020	9		818									
			08		0125		1724		805		25				0.7			818									
			0 B	TD	0150 0150		1741 1741	34	93 925		32 32	UÇ	078	12	022	29		830 830									
			08		0150		1688		920 830		32							810									
			08		0199		674		035		50							813									
				TD	0200		65U	34			39	0.0	0724	+1	026	57		802									
			0 8	5	0200	0	650		855		39						14	802									
			ΟВ		0240		562		855						- 2			773									
				TD	0250		556	34			53		0601		030			772									
			0 B	TD	0300		529	34	920 920		60 60	UÇ	0537	15	032	19		770									
				TD	0400		482	34			69	0.0	0451	7.0	037	7.8		770 768									
			OB		0400		482		968		69	00	7077	, ,	0,5	0		768									
				TD	0500		455	34			73	0.0	00433	3 7	042	23		774									
			ΟВ	S	0500	0	455	34	973	27	73						14	774									
				TD	0600		453	35			75	00	04420	06	046	6		790									
			ОВ		0600		453		002		75	_				-		790									
				TD	0700		431	35			77	0.0	00406	55	050	7		797									
			0.5	TD.	0700 0800		431	35	000		77 78	0.0	0403	2 1-	054	R		797 805									
			08		0800		1412		77 987		78	U	.040	0	ب ر ن	• 0		806									
				TD	0900		403	34			79	0.0	0402	2.5	0 > 8	8 8		819									
			08		0900		1403		987		79	• •		_	J - 0	-		819									
			5	TD	1000	0	1399	34	99		80	0.0	0404	+ 1	002	28		834									
			08		1000		1399	-	991		80							834									
				TD	1100		1376	34			81	0.0	0402	2.2	006	9		840									
			0.8		1100		1376		968		81	_						840									
				TD	1200		374	34			81	0.0	0409	12	070) 9		856									
			08	S TD	1200 1300		1374 1370	34	967 97		81	00	0409	וב	079	. 13		856 871									
			08		1300		1370		91 972		82	V	,,,40	7 I	Q 7 5	, ,		871									
				TD	1400		369	34			84	0.0	0412	2 7	0.79	1		888									
			08		1400		369		977			~ 0		- 1	J.,	-		888									
				TD	1500		362	34			83	0.0	0413	3.5	083	12		902									
			08	15	1500	J	362	34	975								14	906									

	REFERENCE	,												T MAX								
	CTRY ID.		LATITU	DE LO	NGITUDE 5	SQUARE	IGM	11		CRUISE	STATIO	N	TO	DEPTH		ERVATIONS	THER	CODES		51	NOITA	
				-	17 10	10 1						R		S'MPL'			-+	1		N N	JMBER	
March Can Sept Can Sept Can Sept Se	3 1800	1 FA I	4425	ON O	48060W				1966					15	33	2 3	X1	013			0100	
							1	I SPEE	Dcrr	-	,	- VIS	OBS.	SPE	CIAL							
						CODE	Im I	FOR	CE (mbs	1 8UL8	BULE	3		OBJEK	/A IIOIVS							
STO 0000 1360 3335 2502 0029519 0000 15008 1						DT	SD 3	3 50	8 30	5 100	07	8 7	31									
STD 0000 1360 3335 2502 0029519 0000 15008 1		MESSENGR	CAST		DEPTH (m)	T °C	5 %	İ	SMA-T		UME	≨ A D	\$0	DNU	O 2 ml/1			NO2-N				5
197		HR 1/10	I NO.	TYPE						ANUMALT-	(10)	x 10 ³	VEL	OCITY	•	ug - 01/1	μg = 01/I	ug - at/i	yg - at/l	µg - a1/1	-	c
197						1240	2225	1					١,,	1		1						
STO 0010 1300 3335 2502 0029940 0059 15010 15010 0050 0059 0059 15012 15010 0059 0059 15012 15011 15012 15010 0050 0059 0059 15012 15012 15013 15010 0050 0059 0059 15013 1501		19	7							00295	19	0000										
OBS OILO 13-03 33355 2500 2500 2501		- /	'							00295	45	aú 3 d										
085 0020 1303 33355 2501 15012 085 0025 1303 33355 2502 027959 008 15013 085 0030 1360 33365 2502 027959 008 15013 085 0030 1360 33365 2502 027959 008 15013 085 0050 0050 0697 3372 2644 0154 14761 085 0075 075 3485 2718 0016084 0134 14761 085 0077 0765 34865 2718 14866 0186 0186 0179 0765 34790 2718 14866 0186 0179 0765 34790 2718 14866 0186 0187 0188 3480 2718 14866 0186 0187 0188 3480 2718 14866 0189 0189 0199 0188 14819 14866 0185 0190 0188 34830 2718 14866 0189 0189 0199 0188 14819 14866 0185 0190 0188 34830 2718 14866 0189 0189 0199 0188 34830 2718 14866 0189 0189 0195 0195 0642 34860 2725 0008477 0210 14784 0186 0185 0195 0642 34860 27366 0185 0195 0722 3493 2735 0007609 0230 14863 0185 0195 0722 3493 2736 0085 0195 0200 0654 34965 2744 0008476 0266 14860 085 0191 0624 34866 2744 0008476 0266 14860 085 0191 0624 34860 27366 085 0191 0624 34860 27366 085 0191 0624 34860 27366 085 0191 0624 34860 2736 085 0191 0624 34860 2736 085 0191 0624 34860 2736 085 0191 0624 34860 2736 085 0191 0624 34860 2736 085 0191 0624 34860 2736 085 0191 0624 34860 2736 085 0191 0624 34860 2736 085 0191 0624 34860 2736 085 0191 0624 34860 2736 085 0191 0624 34860 2736 085 0191 0624 34860 2736 085 0191 0624 34860 2736 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0689 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 34990 2749 085 0200 0869 0860 0860 0860 0860 0860 0860 08				085																		
STD O30		20	2							00295	92	0059										
STD 030		00	2																			
STD OBS										00295	59	0089										
STO OUT																						
STD O075 O795 3465 2718 O049099 O166 14838 O85 O775 O795 34495 2718 O85 O779 O765 34790 2718 O85 O85 O85 O868 O769 34830 2718 O869 O868 O769 34830 2718 O869 O869 O769 O738 3476 2719 O869 O119 O738 3476 2719 O869 O772										00160	84	0134										
085 0075 0795 3.848 2718 1.4826 085 0079 0705 3.848 2718 1.4826 085 0086 0789 3.830 2718 1.4827 510 0100 0738 3.476 2719 000009 0188 1.4817 085 0119 0588 3.476 2719 1.4819 085 0119 0588 3.456 2725 1.470 085 0125 0642 3.460 2725 000477 0213 14760 510 0150 0722 3.493 27360 510 0150 0722 3.493 27360 085 0165 0742 3.4962 2736 085 0165 0742 3.4962 2736 085 0191 0624 3.466 2726 000476 0266 14803 085 0191 0624 3.4965 2744 1.4790 085 0200 0654 3.496 2736 1.4823 085 0200 0654 3.4965 2774 1.4810 085 0200 0557 3.4875 2773 510 0200 0557 3.4875 2773 510 0300 0527 3.4895 2758 1.4773 085 0300 0527 3.4895 2758 1.4773 085 0300 0527 3.4895 2758 1.4773 085 0400 0489 3.4972 2749 000451 0416 1.4711 085 0400 0489 3.4972 2779 0004451 0.21 1.4710 085 0500 0441 3.4992 2776 0004451 0.21 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0600 0441 3.4992 2776 1.4771 085 0700 0438 35010 2777 0004097 0505 1.4860 085 0700 0438 35010 2777 0004097 0505 1.4860 085 0700 0438 35010 2777 0004097 0505 1.4860 085 0700 0438 35010 2777 0004097 0505 1.4863 085 1000 0377 3.4992 2781 0004050 086 1.4863 085 1000 0377 3.4992 2781 0004050 086 1.4863 085 1000 0370 3.4972 2782 0004050 086 1.4863 085 1000 0370 3.4972 2782 0004050 086 1.4865 085 1000 0370 3.4973 2782 0004050 0786 1.4865 085 1000 0370 3.4973 2782 0004050 0786 1.4865 085 1000 0370 3.4973 2782 0004050 0786 1.4865 085 1000 0370 3.4973 2782 0004050 0786 1.4865 085 1000 0370 3.4973 2782 0004050 0786 1.4865 085 1000 0370 3.4973 2782 0004050 0786 1.4865 085 1000 0370 3.4973 2782 0004050 0786 1.4865 085 1000 0370 3.4973 2782 1.4865 085 1000 0370 3.4973 2782 0004050 0786 1.4865 085 1000 03								_		00000	0.0	21//										
0BS 0076 34790 2718 14826 0BS 0088 0769 34830 2719 0000009 0188 14819 51D 0100 0738 3476 2719 0000009 0188 14819 0BS 0100 0738 34755 2719 14760 0BS 0119 0588 34565 2725 0004477 0213 14760 0BS 0125 0642 34602 27360 14823 14823 0BS 0150 0722 34932 2735 0007609 0230 14823 0BS 0150 0722 34932 2736 14823 14823 0BS 0191 0624 34980 2744 14804 14804 0BS 02191 0624 34980 2747 14805 14805 0BS 0220 0557 3488 2733 005985 0297 14773 0BS 0250 0557										00090	77	0.100										
STD 0100 0738 3476 2719 000*009 0188 14819 085 0119 0588 34555 2725 14760 085 0119 0588 34565 2725 0008477 0210 14764 085 0125 0642 34800 27360 27360 370 0150 0722 3493 2735 0007609 0230 14823 085 0155 0742 34980 2736 14823 085 0165 0742 34980 2736 14824 085 0191 0524 34865 2744 0008476 0266 14800 085 0191 0524 34985 2747 0008476 0266 14800 085 0200 0554 3497 2747 0008476 0266 14800 085 0200 0554 34990 2747 0008476 0266 14800 085 0220 0554 34990 2747 0008476 0266 14800 085 0220 0555 34885 2733 0005985 0227 0266				OBS	0079	0765	3479	0 2	718													
OBS 0100 073H 34755 2710 14619 OBS 0119 058H 34565 2725 14760 STD 0125 0642 34600 2725 000477 021 14784 OBS 0125 0642 34800 27360 00000 14823 OBS 0150 0722 3493 2735 00000 14823 OBS 0165 0742 34980 2736 14823 OBS 0161 6624 34865 2744 00044 14790 STD 0200 0554 34970 2747 00044 14805 OBS 0220 0557 3488 2753 0005985 0297 14773 STD 0250 0557 3488 2753 0005985 0297 14773 STD 0300 0527 34895 2758 000593 02464 14769 OBS 0300 0527 34895																						
OBS										00000	09	0188										
STD 0125 0642 34480 2735 0004477 0210 14784 OBS 0150 0722 3493 2735 0007609 0230 14823 OBS 0150 0722 3493 2735 14823 OBS 0150 0742 34980 2736 14823 OBS 0151 0624 34985 2744 14790 STD 0200 0654 3497 2747 0006476 0266 14805 OBS 0220 0658 34990 2747 14800 OBS 0220 0658 34990 2747 14800 OBS 0220 0658 34990 2749 14773 OBS 0250 0557 3488 2753 000598 0297 14773 OBS 0250 0557 34885 2758 0005937 0326 14769 OBS 0300 0527 34895 2758 0005937 0326 14769 OBS 0300 0527 34895 2758 0004046 0376 14771 OBS 0300 0527 34895 2758 0004466 0376 14771 OBS 0400 0489 34970 2769 0004466 0376 14770 OBS 0500 0447 3496 2775 0004341 0421 14770 OBS 0500 0447 3496 2775 0004341 0421 14770 OBS 0500 0447 3496 2775 0004097 0905 14800 OBS 0700 0438 35007 2777 0004097 0905 14800 OBS 0700 0438 35007 2777 0004097 0905 14800 OBS 0800 0424 35907 2777 0004097 0905 14800 OBS 0800 0424 35907 2777 0004097 0905 14800 OBS 0800 0424 35907 2777 0004097 0905 14800 OBS 0800 0424 35907 2777 0004097 0905 14800 OBS 0800 0424 35907 2777 0004097 0905 14800 OBS 0800 0424 35907 2777 0004097 0905 14853 OBS 0800 0424 35907 2777 0004097 0905 14853 OBS 0800 0424 35907 2779 000405 086 14863 OBS 1000 0397 34995 2781 000405 086 14863 OBS 1000 0397 34997 2782 0004023 0766 14855 OBS 1200 0370 3497 2782 0004023 0766 14857 OBS 1400 0367 3498 2782 0004023 0766 14857 OBS 1400 0367 3498 2782 0004023 0767 14871 OBS 1400 0367 3498 2782 0004023 0766 14857 OBS 1400 0367 3498 2782 0004023 0766 148																						
STD					0125			2	725	00064	77	041										
OBS																						
OBS 0165 0742 34980 2736 14634 OBS 0191 0624 34865 2744 000476 0266 14790 STD 0200 0654 34965 2747 000476 0266 14805 OBS 0220 0658 34990 2747 14800 STD 0250 0557 3488 2753 0005985 0297 14773 OBS 0250 0557 3488 2753 0005985 0297 14773 OBS 0300 0527 34875 2758 0005537 0326 14769 OBS 0300 0527 34895 2758 0004646 0376 14771 OBS 0400 0489 3497 2769 004417 14771 STD 0500 0447 3496 2773 000431 14770 OBS 0500 0441 34993 2776 0004132 0464 14785										30076	09	0230										
OBS								_														
OBS 0200 0654 34900 2747 14800 OBS 0220 0658 34990 2749 14810 STD 0250 0557 3488 2753 0005985 0297 14773 STD 0300 0527 34895 2758 0005537 0326 14769 OBS 0300 0527 34895 2758 0005537 0326 14769 OBS 0300 0527 34895 2758 0005537 0326 14769 STD 0400 0489 34970 2769 14771 14771 STD 0500 0447 34960 2773 0004341 0421 14770 OBS 0500 0441 34993 2776 0004132 0464 14785 STD 0700 0438 3501 2777 0004097 0205 14800 OBS 0700 0438 35007 2777 14800 14811																						
OBS										00064	76	0266										
STD 0250 0557 3488 2753 0005985 0297 14773 OBS 0250 0557 34875 2758 14773 STD 0300 0527 34895 2758 14769 OBS 0300 0527 34895 2758 14769 STD 0400 0489 3497 2769 0004646 0376 14771 OBS 0400 0489 3497 2769 0004646 0376 14771 OBS 0500 0447 34960 2773 0004341 0421 14770 OBS 0500 0447 34960 2773 14770 STD 0600 0441 3499 2776 0004132 0464 14785 OBS 0600 0441 34993 2776 14770 OBS 0600 0441 34993 2776 14775 STD 0700 0438 3501 2777 0004097 0>05 14800 OBS 0700 0438 3501 2777 0004031 046 14811 OBS 0800 0424 35007 2777 14800 OBS 0700 0413 3501 2779 0004031 046 14811 OBS 0800 0424 35007 2779 14800 OBS 0700 0413 3501 2780 0004005 086 14823 STD 0900 0413 3501 2780 0004005 086 14823 STD 1000 0397 3500 2781 0003988 0026 14833 STD 1000 0397 3500 2781 0003988 0026 14833 STD 1100 0386 3498 2781 0004056 066 14845 OBS 1100 0386 3498 2781 0004099 7747 14871 OBS 1300 0372 3497 2782 0004099 7747 14871 OBS 1300 0370 3497 2782 14887 STD 1400 0367 3497 2782 14887 STD 1400 0367 3497 2782 14887 STD 1400 0367 3497 2782 14887 STD 1400 0367 3497 2782 14887 STD 1400 0367 3498 2781 0004099 7747 14871 OBS 1300 0370 34971 2782 14887 STD 1400 0367 3498 2782 0004102 0788 14887 STD 1400 0367 3498 2782 0004102 0788 14887 STD 1400 0367 3498 2782 0004102 0788 14887 STD 1400 0367 3498 2782 0004102 0788 14887 STD 1400 0367 3498 2782 0004102 0788 14887 STD 1400 0367 3498 2782 0004102 0788 14887 STD 1400 0367 3498 2782 0004102 0788 14887 STD 1400 0367 3498 2782 0004102 0788 14887 STD 1400 0367 3498 2782 0004102 0788 14887 STD 1400 0367 3498 2782 0004102 0788 14887 STD 1400 0367 3498 2782 0004102 0788 14887																						
08S 0250 0557 34875 2758 14773 STD 0300 0527 3490 2758 0005537 0326 14769 08S 0300 0527 3490 2758 14769 5TD 0400 0489 3497 2769 0004646 0376 14771 08S 0400 0489 3497 2769 14770 08S 0500 0447 3496 2773 0004341 0421 14770 08S 0500 0441 3499 2776 0004132 0464 14785 08S 0600 0441 3499 2776 0004132 0464 14785 08S 0600 0441 3499 2776 0004132 0464 14785 5TD 0700 0438 3501 2777 0004097 0>05 14800 08S 0700 0438 3501 2777 0004097 0>05 14800 08S 0700 0438 3501 2777 0004097 0>05 14800 08S 0700 0438 3501 2777 0004097 0>06 14801 08S 0800 0424 35007 2777 14811 08S 0800 0424 35007 2779 14811 08S 0800 0424 35007 2780 14823 STD 0900 0413 3501 2780 0004005 0>86 14823 STD 1000 0397 3500 2781 0003988 0>26 14833 08S 1000 0397 3500 2781 0003988 0>26 14833 STD 1100 0396 34995 2781 14833 STD 1100 0386 3498 2781 0004056 0>66 14845 STD 1200 0372 3497 2782 0004099 0747 14871 08S 1300 0370 3497 2782 0004099 0747 14871 08S 1300 0370 3497 2782 0004099 0747 14871 08S 1300 0370 3497 2782 0004099 0747 14871 08S 1300 0370 3497 2782 0004099 0747 14871 08S 1300 0370 3497 2782 0004099 0747 14871 08S 1300 0370 34971 2782 14887 STD 1400 0367 34977 2782 000402 0788 14887 08S 1400 0367 34977 2782 5004102 0788 14887 08S 1400 0367 34977 2782 5004102 0788 14887 STD 1500 0362 3498 2783 0004128 0529 14962					-					0.055.9	95	0.201										
OBS							-			0000	0 2	V 2 7 1										
STD 0400 0489 3497 2769 0004646 0376 14771 OBS 0400 0489 34970 2769 14771 STD 0500 0447 34960 2773 0004341 0421 14770 OBS 0500 0441 34990 2776 0004132 0464 14785 OBS 0600 0441 34993 2776 0004097 055 14800 STD 0700 0438 35017 2777 0004097 055 14800 OBS 0700 0438 35017 2777 0004031 0546 14811 OBS 0700 0424 35007 2777 14800 14811 STD 0800 0424 35007 2779 040431 14811 STD 0900 0413 3501 2780 0004005 086 14823 OBS 1000 0397 3500 2781 000398 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>00055</td><td>3 7</td><td>0326</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>										00055	3 7	0326										
OBS																						
STD						-	-			00046	46	0376										
OBS 0500 0447 34960 2773 14770 STD 0600 0441 3499 2776 0004132 0464 14785 OBS 0600 0441 34993 2776 14785 STD 0700 0438 3501 2777 0004097 0>05 14800 OBS 0700 0438 3501 2777 0004097 0>05 14800 STD 0800 0424 3501 2779 14800 STD 0800 0424 3501 2779 14801 OBS 0800 0424 3501 2779 14801 STD 0900 0413 3501 2780 0004005 0>86 14823 OBS 0900 0413 35006 2780 003978 0>26 14823 STD 1000 0397 3500 2781 003988 0>26 14823 OBS 1000 0397 34995 2781 14833 STD 1100 0386 34980 2781 14845 STD 1200 0372 34977 2782 0004023 0766 14855 OBS 1200 0372 34977 2782 0004099 0747 14871 OBS 1300 0370 34971 2782 14871 OBS 1300 0370 34971 2782 14871 OBS 1400 0367 3498 2784 0004020 0788 14887 STD 1400 0367 3498 2782 14887 STD 1400 0367 3498 2782 14887 STD 1400 0367 3498 2782 14887 STD 1500 0367 3498 2782 14887 STD 1500 0367 34977 2782 14887										00043	41	0421										
OBS					0500	0447	3496	0 2	773		_			770								
STD										00041	32	0464										
OBS 0700 0438 35007 2777 14800 STD 0800 0424 3501 2779 0004031 0546 14811 OBS 0800 0424 3501 2780 0004005 0586 14823 OBS 0900 0413 3501 2780 0004005 0586 14823 STD 1000 0397 3500 2781 0003988 0526 14833 OBS 1000 0397 3500 2781 0004056 066 14845 STD 1100 0386 3498 2781 0004056 066 14845 OBS 1100 0386 34980 2781 14855 STD 1200 0372 3497 2782 0004023 0706 14855 OBS 1200 0372 3497 2782 0004028 0586 14871 OBS 1300 0370 3497 2782 0004099 0747 14871 OBS 1300 0370 34971 2782 14871 STD 1400 0367 3498 2782 0004102 0788 14887 OBS 1400 0367 3498 2782 14887 STD 1500 0362 3498 2783 0004128 0629 14902										00010	0.7	0 - 0 -										
STD										00040	97	0205										
OBS 0800 0424 35007 2779 14811 STD 0900 0413 3500 2780 0004005 0>86 14823 STD 1000 0397 3500 2781 0003988 0=26 14833 OBS 1000 0397 34995 2781 14833 STD 1100 0386 3498 2781 0004056 0=66 14845 OBS 1100 0386 34980 2781 14845 STD 1200 0372 3497 2782 0004023 0766 14855 OBS 1200 0372 3497 2782 0004099 0747 14871 OBS 1300 0370 34971 2782 14871 OBS 1300 0370 34971 2782 14871 STD 1400 0367 34978 2782 0004099 0747 14871 OBS 1300 0370 34971 2782 14871 STD 1400 0367 34977 2782 0004099 0747 148871 OBS 1400 0367 34977 2782 0004102 0788 14887 OBS 1400 0367 34977 2782 14887 STD 1500 0362 3498 2783 0004128 0=29 14962										00040	31	0546										
OBS 0900 0413 35006 2780 14823 STD 1000 0397 3500 2781 0003988 0e26 14833 OBS 1000 0397 34995 2781 14833 STD 1100 0386 3498 2781 0004056 0e66 14845 OBS 1100 0386 34980 2781 14845 STD 1200 0372 3497 2782 0004023 0706 14855 OBS 1200 0372 3497 2782 14855 STD 1300 0370 3497 2782 14855 STD 1300 0370 3497 2782 14871 OBS 1300 0370 3497 2782 14871 OBS 1300 0370 3497 2782 14871 STD 1400 0367 3498 2782 14887 OBS 1400 0367 3498 2783 0004128 0e29 14902								_														
STD 1000 0397 3500 2781 0003988 0026 14833 085 1000 0397 34995 2781 14833 STD 1100 0386 3498 2781 0004056 0066 14845 085 1100 0386 34980 2781 14845 STD 1200 0372 3497 2782 0004023 0706 14855 OBS 1200 0372 34973 2782 14855 STD 1300 0370 34971 2782 0004099 0747 14871 OBS 1300 0370 34971 2782 14871 STD 1400 0367 34971 2782 14887 OBS 1400 0367 34977 2782 14887 STD 1500 0367 34977 2782 14887 STD 1500 0367 34977 2782 14887										00040	05	0>86										
OBS 1000 0397 34995 2781 14833 STD 1100 0386 3498 2781 0004056 066 14845 OBS 1100 0386 34980 2781 14845 STD 1200 0372 3497 2782 0004023 0706 14855 OBS 1200 0372 34973 2782 14855 STD 1300 0370 3497 2782 0004099 0747 14871 OBS 1300 0370 34971 2782 14871 STD 1400 0367 3498 2782 0004102 0788 14887 OBS 1400 0367 3498 2782 14887 STD 1500 0362 3498 2783 0004128 0629 14962										00039	9.8	0026										
STD 1100 0386 3498 2781 0004056 0666 14845 1100 0386 34980 2781 14845 1484										00000	00	002										
STD 1200 0372 3497 2782 0004023 0766 14855 0BS 1200 0372 34973 2782 14855 STD 1300 0370 3497 2782 0004099 0747 14871 0BS 1300 0370 34971 2782 14871 STD 1400 0367 3498 2782 0004102 0788 14887 0BS 1400 0367 34977 2782 14887 STD 100 0362 3498 2783 0004128 0429 14962				SID	1100	0386	3498	2	781	00040	56	0066	14	+845								
OBS 1200 0372 34973 2782 14855 STD 1300 0370 3497 2782 0004099 0747 14871 OBS 1300 0370 34971 2782 14871 STD 1400 0367 3498 2782 0004102 0788 14887 OBS 1400 0367 349977 2782 14887 STD 1500 0362 3498 2783 0004128 0429 14902												a = -										
STD 1300 0370 3497 2782 0004099 0747 14871 OBS 1300 0370 34971 2782 14871 STD 1400 0367 3498 2782 0004102 0788 14887 OBS 1400 0367 34977 2782 14887 STD 1500 0362 3498 2783 0004128 0429 14962										00040	23	0706										
OBS 1300 0370 34971 2782 14871 STD 1400 0367 3498 2784 0004102 0788 14887 OBS 1400 0367 34977 2782 14887 STD 1500 0362 3498 2783 0004128 0429 14902										00040	99	0741										
OBS 1400 0367 34977 2782 14887 STD 1500 0362 3498 2783 0004128 0029 14902							3497	1 2	782				14									
STD 1500 0362 3498 2783 0004128 0629 14902				STD						00041	0.2	0788										
							-			00041	2.8	0.420										
OUG 1000 0302 34770 2700 147702				085	1500	U362	3490		783	00041		J • Z :										

REFEREN	ICE	SHIP	LATITE	JOE	LON	GITUDE JUNICETA	MARS SOU	SDEN ARE	STAT	ION TI	M.E.	YEAR	CRUI	ORIGINA	TOR'S	\Box	DEPTH	MAX		WAVE	DNS	WEA-	CLOU			,	ODC	
ODE	NO.	CODE	•	1/10		· '1/10 0 ਵ	10*	1*	MOI	H YAC	R.1/10		NO). N	UMBER		BOTTOM	OF S'MPL	'S DIR.	HGT PER	SEA	CODE				N	UMBER	
3180	007	Ev	442	NC7	04	8210W	149	48	11	10 .	14	1966		08	7		3240	1:	00	2 4		X1	0	3			0101	
								WA	TER	W	IND	BARO		AIR TEN	P. °C	- VIS	NO.		ECIAL			'				,		'
								COLOR	TRANS.	DIR.	SPEED	M ETEI	R	ORY BULB	WET	CODE	OBS. DEPTHS	OBSER	VATIONS									
								DT	SD	34	SU5	31	_	106	078	-	29											
			7		-			U	30	54	303	1 ,1	۷	100	_		2.7	L						_				
		MESSENGR TIME	CAST	CAR		DEPTH (m)	1	*C	s	٠/	SIGN	A-T	SPECI	FIC VOLUA	(E ∑	A D		JND	0 2 m1/1	PO4		TOTAL-P	NO2-N			SI 04-SI	ρН	S
		HR 1/10	1	1			-		ļ		ļ					(10 ³	VELL	CITY		μg - 1	1/1	μg = σ1/1	μg - α1/	l μg -	01/1	µg + at/l		c
					+ 1	01100	Ι,	7.30	7.7]	, ,	0.0	200	,	230	1	- 0.0					ľ					
		21		08.	TD '	0000		330	33	40 395	25 25		ŲÜ	2861	1 0	000		999 999										
		2.1	•		TD	0010		331	33		25		0.0	2665	5 U	029		001										
				06		0010		331		395	25							001										
					TD	0420		331	33		25		0.0	2008	1 Ü	057		002										
		0.0	2	0.5		0020		331		395	2.5							002										
				âQ e	5 TD	0025 0030		331	33 33	395	25 25		0.0	12843	2 0	086		999										
				0B.		0030		317		395	25		00	12043	9 0	000		999										
					TD	0050		086	33		25		0.0	2388	9 0	138		923										
				08.		0050		086		455	25							923										
					T D	0U75		950	34		26		00	1094	5 0	182		845										
				ОВ.		0075		950		645	26		2.0			. 7		845										
				08:	T D	0100		755	34	705	27 27		UU	0901	5 U	07ء		624 824										
					TD	0125		712	34		27		0.0	0832	3 0	230		813										
				08:		0125	0	712	34	805	2.7							813										
					TD	0150		614	34		27		00	10759	9 0	250	14	778										
				08.		0150		614		735	27							778										
				08: 08:		0160 0170		563 608		655 935	27 27							758 781										
				08		0190		553		850	27							701										
				S	ŦD	0200		570	34		27		00	0607	3 0	284		770										
				08.		0200		570		875	2 7							770										
					TD	0250		529 517	34		27		00	10573	2 0	313		761										
				0B:		0264 0280		539		860 955	27							759 772										
					TD	0300		521	34		27		0.0	05130	0 0	341		767										
				08		0300		521		940	27							767										
					ΤD	0400		489	34		27		00	10446	3 0	385		771										
				08	S TD	0400		489		994	27			011		(2 2		771										
				0B:		0500 0500		457 457	35	999 999	27		00	10416	/ 0	432		775 775										
					τD	Ü600		438	35		27		ō.o	15408	2 0	473		783										
				08	5	060ũ		438		995	27							783										
					TD	0700		429	35		27	78	00	0401	9 0	514	14	796										
				08:		0700		429		003	2.7							796										
				08:	TD	0800		412	34	99 9 91	27		00	0400	7 0	554		806										
					T D	3900		399	34		27 27		٥٥	0398	5 0	594		806 817										
				08		0900		399		986	27		00		, ,	- , -		817										
					GT	1000		393	34		27		00	04050	0	634		831										
				08		1000		393		980	27							831										
				08:	T D	1100 1100		386	34		27		00	04041	3 0	674		845										
					5 TD	1200		386 377	34	981 98	27 27		0.0	0406	3 0	715		845 858										
				0B:		1200		377		976	27		00	J-00.	, 0			858										
				S	TD	1300	O	370	34		27		00	0406	2 0	755		871										
				08		1300		37∪		976	27						14	871										
					TD	1400		367	34		27		0.0	04116	0	796		887										
				08:	S TD	1400 1500		367 367	34	975	27		0.0	06114	2 2	M 2 D		887										
				08:		1500		367		986	271		00	0411	, U	٥38		904 904										
					-		-		,								1.7	<i>7</i> 0 4										

The code Cod	NODC STATION NUMBER NODC STATION NUMBER NODC STATION NUMBER NODC STATION NUMBER NODC STATION NUMBER NODC STATION NUMBER
18007 EV 44300N 048360W 149 48 11 10 229 1966 088 2700 15 00 0 X0 0	0 3 0102
WATER WIND COLOR TRANS DIR, SPEED AMETER DRY WET CODE OBSERVATIONS DT SD 22 SO2 322 089 072 7 25	02-N NO3-N 5104-51 0H C
COLOR TRANS. DIR. SPEED ARCTORY (mb.s) BULB SULB SPECIAL OBSERVATIONS DT SD 22 SU2 322 089 072 7 25	
DT SD 22 S02 322 089 072 7 25	
MESSENGR CAST CARD DEPTH (m) T 'C S '/. SIGMA-T SPECIAL VOLUME \$ \(\Delta \) D SOUND O2 m// PO4-P TOTAL-P NO	
HR 1/10 NO. TYPE ANOMALY-1107 X 102 VELOCITY U9-01/1 U	
STD 0000 1148 3353 2556 0024327 0000 14938	
229 085 0000 1148 33525 2556 14938 STD 0010 1148 3352 2556 0024387 0024 14940	
OBS 0010 1148 33520 2556 14940	
STD 0020 1148 3352 2556 0024409 0049 14941	
002 0BS 0020 1148 33520 2556 14941	
OBS 0025 1147 33520 2556 14942 STD 0030 1147 3352 2556 0024414 0073 14942	
OBS 0030 1147 33520 2556 0024414 0073 14942	
STD 0050 1025 3352 2578 0022395 0120 14902	
OBS 0050 1025 33520 2578 14902	
STD 0075 0686 3421 2684 0012325 0163 14787	
OBS 0075 0686 34210 2684 14787 OBS 0086 0736 34775 2721 14816	
STD 0100 0571 3469 2723 0008629 0190 14791	
OBS 0100 0671 34685 2723 14791	
STD 0125 0602 3473 2735 0007488 0210 14769	
085 0125 0602 34725 2735 14769	
STD 0150 0575 3478 2743 0006818 0228 14762 OBS 0150 0575 34775 2743 14762	
STD 0260 0538 3486 2754 0005841 0459 14757	
OBS 0200 0538 34855 2754 14757	
STD 0250 0507 3486 2757 0005537 0288 14752	
STD 0300 0488 3485 2759 0005383 0315 14753 OBS 0300 0488 34854 2759 14753	
OBS 0300 0488 34854 2759 14753 STD 0400 0485 35⊎1 2772 0004286 0363 14770	
OBS 0400 0485 35012 2772 14770	
STD 0500 0447 3498 2774 0004185 0406 14770	
OBS 0500 0447 34981 2774 14770	
STD 0600 0433 3499 2776 0004075 0447 14781 OBS 0600 0433 34988 2776 14781	
STD 0700 0425 3500 2778 0004032 0488 14795	
OBS	
STD 0800 0382 3494 2778 0004041 0528 14792	
085 0800 0382 34939 2778 14792 STD 0900 0399 3498 2779 0004029 0568 14817	
085 0900 0399 34980 2779 0004027 0301 14617	
STD 1000 0399 3499 2780 0004041 0609 14834	
OBS 1000 0399 34991 2780 14834	
STD 1100 0392 3499 2781 0004063 0649 14847	
085 1100 0392 34989 2781 14847 570 1200 0381 3499 2782 0004632 0590 14859	
085 1200 0381 34987 2782 14859	
STD 1300 0366 3497 2782 0004078 0730 14870	
085 1300 0366 34967 2782 14870	
STO 1400 0366 3497 2782 0004118 0771 14886 0BS 1400 0366 34973 2782 14886	
085 1400 0366 34973 2782 14886 STD 1500 0367 3499 2783 0004112 0812 14904	
OBS 1500 0367 34987 2783 14904	

REFERENCE	SHIP	LATITU	TOE FO	NGITUDE ENGL	MARSDEN SOUARE		ION TI	7	EAR	ORIGINA	ATIO	N	DEPT TO BOTTO	OF	OBSE	WAVE ERVATIONS	CODE	COOES		S.	NODC TATION UMBER	
_			1/10	1710		MO I			044	_	UMBE	R		3 1417 E		HGT PER S	-	1177				
318007	Eν	443	30N 04	851JW	149 48 WA	_		05 1	966	O 8		\dashv	173	1	, ,		x1	013	1	-	0103	
					COLOR	TRANS.	DIR	SPEED	8ARO+ METER	DRY	WET	CODE	OBS DEPT	OBSER	CIAL VATIONS							
					CODE	(m)		FORCE	(mbs)	BULB	8016	B	Deri	13								
					DT	SD	29	510	318	094	0.7		34	`				_				_
	MESSENGE	CAST	CARD TYPE	DEPTH (m)	r *c	s	٠/	SIGMA	λ-T 5	PECIFIC VOLUM	ĄĘ.	₹ A D		ELOCITY	02 ml/1	PO4-P	TOTAL-P	NO2-N	NO3-N	\$104-\$1	рН	Š
,	HR 1/10	1	11116			-						x 10 ³	+			yg - 01/1	μg - σ1/l	l/to - gu	yg - a1/1	μg - α1/1	-	4
			STD	0000	1140	33	6.1	255 255	_	002433	ا	0000	ͺͺͺ	 4935				l		1		
	00	5	OBS	0000	1140		505	255		002433	0	0000		14935								
		_	STD	0010	1131	33		255		002431	3	0024		14933								
			OBS	0010	1131		490	255						4933								
	00	2	STD OBS	0020 0020	1051 1051	33	34 335	255 255		002412	7	0049		L4904 L4904								
	00	2	0BS	0025	0994		345	256						14885								
			STD	0030	0954	33		257		002311	0	0072		4870								
			OBS	0030	0954		265	257						4870								
			OBS	0040 0050	0606 0537	32 33	930	259		001879	0	0114		14732 14730								
			STP OBS	0050	0587		18 175	261 261		001019	U	0114		14730								
			OBS	0055	0620		635	264						4750								
			QBS	0066	0311	33	375	266	0				1	4620								
			510	0075	0304	33		270		001072	8	0151		14625								
			085 085	0075 0080	0304		865 225	270 272						L4625 L4630								
			OBS	0085	0400	34		273						14674								
			OBS	0090	0585	34		274						4756								
			OBS	0092	0585	34		274			_			4757								
			0 B 2 2 I D	0100	0541 0541	34	72 720	274 274		000675	7	0173		14740 14740								
			085	0120	0575		805	274						4758								
			STD	0125	0571	34		274		000651	2	0189		14757								
			QBS	0125	0571		805	274						14757								
			OBS	0135	0457	-	625	274			_			4710								
			STD QBS	0150 0150	0461 0461	34	72 715	275 275		000594	9	0205		14715 14715								
			SID	0200	0455	34		275		000526	4	0233		14722								
			OBS	0200	0455		805	275						4722								
			OBS	0230	0480		905	276	4					4738								
			STD	0250	0479 0472	34 34		276 276	4	000487		0258		L4741 L4747								
			OBS	0300	0472		90 895	276		000409)	0283		4747								
			STD	0400	0435	34		276		000454	5	0330		4748								
			OBS	0400	0435		900	276						4748								
			STD	0500	0420	34		277		000447	9	0375		4758								
			OBS STD	0500 0600	0420 0399	34 34	900	277 277		000433	q	0419		L4758 L4766								
			OBS	0600	0399		900	277		VUU773		J - 1 7		4766								
			SID	0700	0389	34	91	277	5	000424	5	0462		4778								
			OBS	0700	0389		910	277						4778								
			STD	0800	0381	34		277		000424	4	0>05		14792								
			OBS STD	0800 0900	0381	34	910 91	2 7 7		000428	7	0547		L4792 L4807								
			OBS	0900	0377		910	277		200720		J - 41		4807								
			STD	1000	0376	34		277		000436	3	0>90) 1	4823								
			OBS	1000	0376		910	277		000//-	1	0 + 3		4823								
			STD OBS	1100 1100	0375 0375	34 34	92 915	277 277		000440	Ţ	0634		L4839 L4839								
			STD	1200	0377	34		277		000443	8	J678		14857								
			OBS	1200	U377	34	925	277	7]	14857								
			STD	1300	0374	34		277		000434	0	0722		4873								
			OBS STD	1300 1400	0374 0372	34 34	945	277 277		000440	0	0747		14873								
			OBS	1400	0372		99 945	277		000440	U	0766		L4889 L4889								
			SID	1500	0370	34		277		000445	8	0010		14905								
			OBS	1500	0370	34	945	277	9					14905								

										•	ADI	د نون			/011	umu	cu										
REFERENCE						_ e	MAR	SDEN	-	STATION TI	IME		T	ORIGIN	ATOR'	s	DEPT	M.A		w	AVE		WEA-	CLOUD	1		NODC
CTRY ID.	CODE	LAT	ITUDE	LON	GITUDE	DRIFT	sat	ARE		IGMTI	-	YEAR	CRUIS		STATIC		TO BOTTO	0	: `		VATIO		THER	CODES	1		STATION
CODE NO.	-		1/10		1/10	+	,,,	1.	M(DAYH			NO		NUMB	ER	80110	M S'MP	L'S DI	R. HI	GT PER	SEA	CODE	TYPE AM			NOMOCK
31800	7 EV	44	360N	04	9060W		149	1	1		026	1966		0.9			071	0 0	6 0	0			X 1	013			0104
								WA	TER	V	VIND	BAR		AIR TE	_	21V	NO.	,	PECIAL								
								COLOR		ANS. DIR.	SPEED OR FORCE	1		DRY	BUL	T CODE	OBS.	1200	RVATION	45							
								DT	-	SD 27	507	` -		094	0		20	+		\dashv							
	MESSENG TIME	CAS NO	ST CAI	RD	DEPTH	(m l		°C	Ť	s ·/	SIG	MA-T	SPECII	MALY-I	JME .	₹ ∆ 0	s	OUND	02 "	n1/1	PO4-		OTAL-P	NO2-N ug - at/l	NO3-N	S1 O4-	
	HR 1/10			.			\downarrow		4		↓				_	x 10 ³	+			-	p y - 0.	-	, , , , ,	24 - 4.7.	pg - 0.7.	-	-
											1						1										1
				TD	000			1949		3338		79	00	2212	23	0000		4864									
	0.2	6	0.8		000			949		33380		79						4864									
			-	TD	001			0872		3330		85	0.0	216	10	0022		4830									
			0.9		001			0872		33295		35	2.2	205/	0.3	0043		4836									
	0.0		08	TD	002			0733 0733		3319 33185	_	97	UU	2050	JI	0043		4783									
	0.0	1 [08		002			1699		33115		3.0						4769									
				TD	003			1645		3307		99	0.0	202	86	0063		4748									
			OB		003			0645		33065		99				000		4748									
				TD	005			0450		3305		20	0.0	182	63	0104		467									
			QB	S	005	0		3450		33045	26	20					1	467]									
			OB		005	7		0100		33205	2 t	63						452									
			0.8	15	006	4		0046		33425	26	83						450									
			S	CT	007	75		0041		3365		701	0.0	105	34	0 T 3 8		4505									
			OB		007	75		0041		33645		701						450									
			08	5	008	86		0130		34055		729						4553									
			5	TD.	010			0153		3410		731	0.0	077	75	016		4566									
			QB		010			0153		34100		731		_				4566									
				TD	012			0164		3413		73_	0.0	U 76	33	0180		4575									
			0.5		012			0164		34130		732	0.		()	019		14579 14582									
			QE	TD	015			0170 0170		3412 34120		731 731	U	0077	00	019		L458;									
			O E		016			0225		34306	_	742						1461									
				TD.	020			0268		3442		747	0.0	0063	23	023		1463									
			OB		020			0268		34418		747	•					463									
				TD	025			0307		3453		753	0.0	058	66	026		1466									
			-	TD	030			0339		3461		756		0155		029	4 1	1468	7								
			Q.E		030			0339		34613		756						1468	7								
			5	TD	040	00		0384		3472	2	760	0.0	053	25	034	8 1	1472	+								
			OB	3.5	040	00		0384		34721	2 "	760					1	1472	+								
			9	STD	050	00		0406		3478	2	762	0.0	052	46	040		l 475									
			OE	35	050			0406		34776		762						1475									
				STD	060			0428		3487		767	00	0049	23	045		1477									
			O E		060			0428		34866		767						477									
			0.8	35	069	υÜ		0428		34857	2	766						1478	5								

ID. CODE	LATITU	DE L	ONGITUDE		JARE 1.		TION			AR	CRUISE NO.		OR"S TION ABER	-	OEPTH TO BOTTOM	DEPT OF S'MP	H O	WAVE ISERVATIONS	CODS	CODES	-	51	NODC ATION UMBER
007 EV	4439		49200W	14		11	11	040	_	966		091			0058	3 0	1 2.	1 2	×ο	0 3			0105
				1	WA	TER		WIND		BARO	AI	R TEMP.	°C	vis.	NO.	,	ECIAL]	·				
					COLOR	TRAN!	. DIR		ED RCE	METER	R DR		V E T U L B	CODE	OBS. DEPTHS	00000	EVATION!						
					DT	SI	22		14	31	8 06	7	001	7	08								
MESSENGI TIME HR 1/10	or NO.	CARD	DEPTH (n)	T 10	2	٠/	5	IGMA	- ⊺	SPECIFIC		D	△ D rN. M. x 10 ³		OCITY	O ₂ ml	PO4-P ug - ot/I	101AL-P µg - at/1	NO2-N ug - at/l	NO3-N yg - al/l	SI O4SI 99 - 01/I	рН
													1		1		1	1					
	_	ST			0551		295		260		0020	0008	Ų	000		+704 +704							
04	0	088 ST(000		0551 0551		295(295		260 260		0020	1018	a	020		705							
		085	001		0551		- 75 2 75 i		260		0020	,010		020		+705							
		510			0547		295		260		001	9984	0	U40	1 4	+705							
0.0	0	085	002	0	0547	3 2	295	Ū.	260	2						+705							
		085	002	5	0549		296		260							+707							
		STO			0540		298		260		0019	9729	0	060		+705							
		065	003		0540		297		260	-						705							
		OBS	004		0180		268		261 267		0.01	3276	0	1093		4549 4503							
		511	005		0055		330 329		267 267		001	1210	0			4503							
		085	000	·	ひしつコ	٠.	164	-	201	4						4506							

REFERENCE CTRY IO. CODE NO. 31600	SHIP CODE	4310	1/10	050	1/10			11 11 ER	HR,1/10 131 WIND	1966	IO-		STATI NUM	DN BER C VIS.	DEPTH TO BOTTON 0073 NO. OBS. DEPTHS	SPE	OIR.	WAVE ERVATION HGT PER	CO.	E TYPE AA	5	N N	NOOC TATION UMBER
	MESSENGI TIME HR 1/10	T NO.	C A F		DEPTH lm1	1	DT c	SD 1	1	3 3; ima-t		078	JME	57 7 ₹ △ D DYN. M x 10 ³		UND	O 2 ml/1	PO4-P pg = a1/	TOTAL- yg = 01/			\$1 O4=\$1 µg = 01/I	рН
	13	1	OB	TD S TD	0000 0000 0010	(0720 0720 0718	3324 3324 3323	0 2	603 603		01989 01995		0000	14	 +775 +775 •776				1			
	0.0	0	08	S TD	0010 0010 0020 0020	Ç	718 718 718	3323 3323 3323	0 2	602 602 602		01996		0020	14	+776 +778 +778							
			06	S TD S	0025 0030 0030 0032	(0718 0605 0605 0530	3323 3305 3305 3298	0 2	602 603 603	0	01991	15	0060	14 14	778 732 732							
			08 08	S S T D	0042 0048 0050 0050	0)380)370)337	3305 3324 3322 3322	5 2 5 2 2	628 644 646 546	0	01500	o B	0096	14 14	641 640 625							

ID.	SHIP CODE	LATITU		LONGIT	UDE .	5	ARSOEN OUARE		TIDN T		YEAR	CRUISE NO.		DR'S TION MBER		DEPTH TO DITOM	MAX. DEPTH OF	OE	WAVE	ions	WEA THER	CODE	i	5	NOOC TATION IUMBER
8007	ΕV	4300	1/10 N1	0502	17 10	- 11	50 30	1 1	DAY F		1966	+	093	NBCK	+	077	S'MPL'	+	HGT PE	R SE	X ì	TYPE A A	+	-	
10000	- • 1	7300	14	0 3 0 2	0 m	1 1	WA	TED		MIND	_	1	IR TEMP.	r T	ᆉ		0.1		101	1	^1	013	ł	l	0107
							COLOR	· ·	+	SPEED OR FORCE	M ETE (mbs	R D	RY \	_		NO. OBS. DEPTHS		CIAL /ATIONS							
							DT	SD	00	500	3.2	2 0	78 .	067	8	09									
	MESSENGR TIME HR 1/10	T NO.	CARI)EPTH (m	1	т °С	s	٠,,	SIGN	I-A	SPECIFIC	VOLUME LY-X10 ²	₹ Z DYN x	. M.		CITY	(3 g m l/	PO.		TOTAL=F µg - o1/I	NO2=N µg = of/1	NO3-N ug - o1/1	51 O4-51 (/to - 64	
ĺ								1		1						١,									
	14	0	089		0000		0705		129 1290	26i 26i		001	7323	00	00		770								
	1.41	0	51		0010		0689		128	26		001	9206	ũυ	1.0		770 765								
			089		0010		0689		1280			001	7200	00	17		765								
			51		0020		0677		129	26		00+	8992	00	3 h		762								
	0.0	0	089		0024		0677		285	26		001	5 ,	00	,,,		762								
	-		059	_	0025		0668		255								759								
			51		0030		0654		126	26		001	5940	00	57		754								
			OB:		0030		0654		3255								754								
			089		0034		0650		255								753								
			OB:		0042		0559		255								718								
			51		0050		0246		17	26		UO1	5487	0.0	92		586								
			089		0050		0246		165	26				-			586								
			ОВ:		0054		0203		400								571								

CTRY ID.	SHIP	LA TITU	1/10	LONGITUDE	DRIFT	10-	+ +	10	ON THE	1,1/10	YEAR	CRUISE ND.	NU	OR'S TION MBER		OEPTH TO BOTTON	3 M F	'S DII		VE A TIONS		E TYPE A	S	S	NDDC TATION NUMBER
31 8007	EV	4251	N	05020	W	150					966		Ú⊋4	-	,	0220	0.2	2	_ Z		X.I	. 0	3	1	0108
							WAT			IN D SPEED	BARC	· -	IR TEMP		VIS	NO.		ECIAL							
							COLOR	TRANS (m)	DIP.	FORCE	[mbs			MEI	CODE	OEPTHS	OBSER	10IT AV	12						
							DT	SD	00	500	32	5 0	78	067	7	15									
	MESSENGR TIME HR 1/10	OF NO.	C A R TYP		(m)	1	°C	2	·/	SIGM	A-T	SPECIFIC ANOMA	VOLUME	וס	△ 0 YN. M. x 10 ³		UNO	D2 m		PD4-P g - 01/1	TOTAL-			SI O4-Si µg - 01/I	
			5				943	334		258		006	1660	Ç	000	14	863								
	15	7	08:				943	330		258							863								
				TD 00			5080	33		259		00-	0244	0	021		813								
			0B				808	33.		259							813								
	2.0		5				0592	331		260		001	9712	U	041		+725								
	0.01	IJ	0B:				592		155	260							725								
			08:				1453	33	120	262		001	. 250	_	0.50		670								
			08:)334)334	33		264		001	6358	U	059		+621 +621								
			08.				253	33:		200							·588								
				TD 00			185	334		261		001	3216	Ω	U 8 9		•564								
			0B:				0185		+10	26		001	2610		• 0 ,		+562								
			08				0140		445	26							+545								
				TD 00			1141	331		27		000	9544	0	117		+553								
			08	5 00	75	(0141	33	355	27	1.2					1 4	+553								
			OB.	s 00	86	į,	140	338	395	27	15					14	+555								
			5	TD 01	00	Ć	197	34.	2.1	27:	36	000	7203	Ū	138	14	+507								
			08.	5 01	0 Ü	(9197	34.	210	27:	36					14	4587								
			08	5 01	20	(232	34.	255	27	3 7					14	4606								
				TD 01			0233	34.		27		000	7216	C	156		+007								
			08				0233		255	27.							46U7								
				TD 01			2234	34.		27		000	7051	Ü	174		+615								
			08			(0239		185	27:							46lɔ								
			08	5 01	72		1261	34	350	274	+ 2					1 4	4629								

ENCE ID.	SHIP	LATITUD	E LON	GITUDE SO	MARSDEN SOUARE	STATION (GA	ATI	YEAR			TATION		DEPTH	MAX DEPTH OF	089	WAVE ERVATION		WEA-	CODES			NOOC	
NO.			1/10	1/10 - 4	1	MO DA	_	+	N		UMBER		BOTTON	S'MPL	_	HGT PER	SEA	CODE	TYPE A M			NUMBER	
8007	EV	4240	N 05	020 W	150 20	11 11			6	09		\perp	1372	13	15	1 3		X 1	03			010	9
					WAT		WIND	- 87	RO-	AIR TEA		vis.	NO. OBS.		CIAL								
					COLOR	TRANS. D	1R. I C		ETER nbs)	ORY BULB	W E T BULB	CDDE	DEPTHS	OBSER	SHOTTAN								
					DT	5D 1			322	128	106	7	27										
												1	T	-							_		_
	MESSENGR TIME 0	CAST ND.	C A R D TYPE	DEPTH (m)	1 %	s °/.	. 9	IGMA-T	SPEC	CIFIC VOLU-	M.E 0	∆ 0 N. M	. SO	OCITY	O 2 ml/l	PO4-		07AL-P	NO 2-N vg - at/1	NO ₃ =N µg - a1/1	SI O4-1		
	HR 1/10	-					+		-		-	x 103	-			17.	-	• • • • • • • • • • • • • • • • • • • •		pg - 0.71	74 - 4.	1	
	ļ		0.70	2000	1170	2201	.		1	0 2 0 2 5	_		,				1						
	163	1	STD OBS	0000	1178 1178	3309		2514 2514	U	02835	5 (000		+943 +943									
	102	,	STD	0010	1154	3302		2516	0	02817	н (0028		+935									
			065	0010	1154	3302		2516			_			1935									
			SID	0020	1012	3304		2542	Э	02567	3 0	055		4000									
	0.02	2	OBS	0020	1012	3304		2542	-					+886									
			005	0025	0890	3312	0	2568					14	+843									
			STD	0030	0839	3334		2593	0	02006	7 (0 78	1 -	+827									
			085	0030	0839	3333		2593						827									
			STD	0050	0556	3366		2657	0	01483	7 (114		+723									
			085	0050	0556	3365		2657						+723									
			OB5	0063	0414	3376		2681				. 1 . =		+668									
			STD	0075	0530	3427		2708	Ü	01000	3 (145		+725									
			OBS	0075 0087	0530 0376	3426 3408		2706						+725									
			085 S T D	0100	0397	3450		2741	0	00687	5 (166		•660 •677									
			085	0100	0397	3449		2741	0	00007	0 (/100		+677									
			OBS	0107	0358	3455		2749						+662									
			STD	0125	0430	3471		755	0	00562	8 (182		+698									
			085	0125	0430	3471		2755						+698									
			085	0130	0450	3475	55 .	2756					14	+708									
			STD	0150	0457	3475		2755	0	00564	4 (196	14	714									
			085	0150	0457	3475		2755						714									
			OBS	0180	0466	3482		2760						+723									
			STD	0200	0436	3484		2764	0	00479	6 (1222		+714									
			OBS	0200 0250	0436 0434	3484		2764		00/83				+714									
			STD	0300	0434	3484		2764		00482 00486) 246) 270		+722									
			OBS	0300	0433	3484		2765	0	00400	,	1210		+730									
			STD	0400	0434	3489		2765	ō	00494	4 (319		+747									
			OBS	0400	0434	3484		2765	Ü			/		1747									
			510	0500	0438	3488		2767	0	00487	0 0	369		+705									
			085	0500	0438	3487		2767						+765									
			SID	0600	0429	3488		2768	0	00483	1 0	9417	14	+778									
			OBS	0600	0429	3488		.768						+778									
			STD	0700	0417	3492		2773	0	00449	4 () + 64		+790									
			OBS	0700	0417	3492		2773	_	a				790									
			STD	0800	0410	3491		2773	Q	00457	0	1509		+804									
			OBS STD	0800 0900	0410 0404	349		2773	-	33	, ,	1600		4804									
			085	0900	0404	349		2773	U	00458	4 ()555		+818									
			STD	1000	0404	3492		2774	7	00461	7 /	ו ה מו		+818 +834									
			085	1000	0402	349		2774	J	00461	, (0001		+834 +834									
			STD	1100	0400	349		2774	Ω	00467	7 (0647		850									
			085	1100	0400	349		2774	0					850									
			STD	1200	0388	3494		2777	0	00450	1 (0693		+862									
			085	1200	0388	349	35	2777						+862									
			STD	1300	0375	3496	+	2779	0	00437	5 (738		4873									
			OBS	1300	0375	3494																	

RENCE				MARSDEN	STA TI	ON TIM				RIGINA	108'5		DEPTH	MAX.		WAVE	WEA-	CLOND			10	
ID. CODE	LATITU	DE	LONGITUOE	SOUARE		MT1		YE AR	CRUISE		ATION		10	DEPTH	08	SERVATIONS	THER	CODES	,		TAT?	ION
NU.	<u> </u>	1/10	1/10	10" 1"	MO D	AY HR.	/10		NO.	N	UMBER	_	801104	Z'MPL	S DIR.	HGT PER SEA	CODE	TYPE AMI			NUM	BER
8007 EV	4230	N (J5020 W	150 20	11 1	1 1	79 1	966		096	5		2176	15	15	2 3	X1	0 3			0	110
				WA	TER	WIN		BARO		IR TEM		- VIS	NO.	SPE	CIAL							
				COLOR	TRANS.	DIR,	OR OR	METER	R D	RY JLB	W ET SULB	CODI	DEPTHS	OBSERV	ATIONS							
				DI	SD	_	SO3	32	_	33		7	7.11	-								
				I Di	30	121	303	1 24	2 1	22	100		29	1				-				
MESSENGA TIME	CAST	CARE	DEPTH (m)	r *c	5	1	SIGM	A-T	SPECIFIC	VOLUA	4 D	A D	. sc	OCITY	02 ml/		TOTAL-P	NO2-N	ИО3−И	5104-		pН
HR 1/10	I	11176							AITOM			x 10 ³	V (1	.00:11		yg - a1/1	µg • o1/l	μg - α1/1	μg - σt/1	yg - 0	171	
					1						-					1 1					ļ	
	_	S1		1199	330		251		002	865	4 0	000		4950								
17	9	089		1199	330		251		0.0	00.7				4950								
		S 1		1193	330		251		002	857	0 (029		4949								
		085		1193 1090	330 330		251 253		0.2 4	677	1 6	056		4949 4915								
00	2	S1 089		1090	330		251		002	677	1 (10 50		4915								
00	2	089		1080	33		254							4914								
		51		0990	33		255		002	412	0 0	082		4882								
		085		0990		205	259							4882								
		51		3640	33:		262		001	808	3 (124		4753								
		овя		0640		355	262	2.3						4753								
		S 1	D 0075	0498	339	99	269	90	001	174	1 (16	1 1	4708								
		085		0498	339		269							4708								
		OBS	0085	0484	34.	110	270	01					1	4706								
		S 1		0539	345		272		000	800	5 (186		4737								
		OBS		Ü539	345		272							4737								
		065		0569	346		27:							4761								
		S 1		0535	345		273		000	798	9 (208		4739								
		085		0535	345		27							4739								
		089		0536	346		27:							4741 4752								
		0B9		0562 0445	346	480	27:							4703								
		S1		0479	340		27		نده	637	2 () 2 2 .		4722								
		OBS		0479		585	27		000	0 ,) - L		4722								
		51		0446	34		27		000	554	0 1	25		4717								
		083		0446		755	27			-				4717								
		51		0456	34		276		000	499	3 () 28	0 1	4731								
		Š:		0462	34		276		000	460		30.		4743								
		OB5		0462	34	919	276	68					1	4743								
		S	D 0400	0465	34	97	27	71	000	439	5 (34	9 1	4761								
		089		0465	34	966	27						1	4761								
			1D 050U	0438			27		000	425	2 (9د(4700								
		OB:		0438		958	27							4766								
		S		0453			27		000	416	2 .) 4 3		4790								
		08		0453		800	27	-			,			4790								
		S.		0440			27		000	409	1 () 4 7		4801								
		0B:		0440 0415			27		200	1406		001		4801 4807								
		S		0415		99 988	27		000	1406	. O .	171.		4807								
		08		0390			27		000	1402	6)55		4807 4813								
		0B:		0390		966	27		000	+02	0 (ر د ر		4813								
			D 1004	0376			27		000	405	3 ()59		4823								
		0B:		0376		952	27		000		- ')		4823								
			TD 1100	0374			27		000	410	1	063		4839								
		0 B		0374		954	27	80						4839								
			TD 1200	0368			27	80	000	410	7	067		4853								
		οв.	1200	0368		955	27						1	4853								
		S	TD 1300	0363			27		000	412	2	072		4800								
		08		0363		950	27							4865								
			TD 1400	0362			2.7		000)415	6	076		4885								
		08		0362		961	27				-	- 0 -		4885								
			tD 1500	0361			27		000	,420	13	080		4901								
		08	s 1500	0361	34	964	27	9 "					1	4901								

ID.	SHIP	LATITU	DE LO	NGITUDE	DRIFT	MARS SOUA	ARE	STAT (ON THE		YE AR	RUISE	STATION'S	4	DEPTH TO BOTTON	OEPTI OF S'MPL	H OBS	WAVE ERVATIONS HGT PER S		CODES			NODC FATION UMBER
8007	Ē٧	4150	_	5020 W		150	10				960		9.7		2000	1	1	0	01	1-1-	1		0111
					•		WA			IND SPEED	BARO- MÉTER	AIR TE	MP. °C	V15.	NO.		ECIAL						
							COLOR	TRANS.	OIR.	OR FORCE	(mbs)	8UL8	BULE	CODE	DEPTHS	OBZER	VATIONS						
						,	O T	SD	11	505	340	560	54		40			-r			r		,
	MESSENGR TIME	CAST	CARD	DEPTH (n	n)	Т	*C	s	٠,,	SIGM	A -T	ANOMALY-	10?	≨ ∆ D OYN, M	. SO	UND	02 ml/l	PO4-P pg - 01/I	10TAL-P	NO ₂ -N ug - at/l	NO3=N #9 - al/l	\$1 O4-\$1 99 • 01/1	рН
-	HR 1/10				-			+			-			x 10 ³	-			-				-	
			510	0000	١	1	206	32	86	249	93	00302	9 J	0000) 14	950	4	1			l		J
	208	3	OBS	0000			206		855	249						950							
			STD	0010			190 190	32	85 845	249		00301	01	0030		+946 +946							
	00.	2	085 085	001			190		850	249						947							
		_	510	0020			130	3.2		250		00290	0.2	0060		926							
			085	002			130		855	250						926							
			085	0025			070		935	252		00317	2 7	2010		1907							
			510 0BS	0030			920 920	32	90 975	255 255		00247	3 1	0087		+853 +853							
			SID	0050			584	33		263		00171	9	0128		731							
			OBS	0050			584		395	26						731							
			085	0055			481 558		400	264						1090							
			085 085	006			529		205 155	270						+734 +723							
			510	0075			592	34		271		00093	12	0161		753							
			065	0079			592		4 55	271						753							
			085	0085			804		855	271				0105		843							
			STD OBS	0100			731 731	34	710	271		00092	4 /	0185		+815 +815							
			STD	0125			635	34		272		00087	9.8	0207		780							
			OBS	012			635	34	605	272						780							
			OBS	013			573		550	272						755							
			085 085	0139			601 547		665 600	273						770 748							
			STD	0150			587	34		273		00074	87	0228		766							
			OBS	015		0	587		705	273						766							
			085	0160			659		835	27.						798							
			OBS	017			549 637	34 34	700	274		00065	C 1	n / :		+754 +797							
			STD OBS	0200			637		925 925	274		00065	71	0263		• 7 9 7 • 7 9 7							
			OBS	020			655		000	275						806							
			085	021			591		900	275						+780							
			0B5 5TD	022			671		J60	275		00054	2.1	2 01		+816							
			042	025			599 598	34	970 950	275		00058) <u>I</u>	0694		+751 +791							
			085	027			613		975	275						800							
			STD	030			569	34		275		00056	04	0322		+787							
			085	030			569		955	279		20052	7.0	0.175		787							
			STD OBS	040			534	34	958	276 276		00052	19	0377		+789 +789							
			510	050			486	34		276		00048	60	0427		+780							
			OBS	050			486		952	276					14	+786							
			085	0541			509		017	271		000//		04.70		£08+							
			STD OBS	060			478 478	34	982 982	27		00046	ככ	0479		+800 •800							
			SID	070			457	34		27		00045	0.3	0521		+808							
			085	070			457		983	27	73					+808							
			SID	080			454	34		27		00045	15	0566		+823							
			0B5 ST0	080			454	34	991 98	27		00044	3.4	0611		+823 +831							
			085	090			433		981	27		00044	77	001		+831							
			STD	100	0	0	422	34		27	76	00044	42	0655	5 1.	+343							
			085	100			422		975	27		00044	75	0700		+843							
			STD OBS	110			411		97 965	27		00044	13	0700		+855 +855							
			STD	120			392		95	27		00044	63	0744		+863							
			OBS	120	J	0	392	34	947	27	7.7				14	+863							
			STD				388	34		27		00044	67	0789		+879							
			085 51D	130			388		949 95	27		00044	85	0834		+879 +692							
			OBS	140			381		949	27		30044	0,7	، ر د د		1892							
			STD	150	Ú	0	1376	34	95	27	79	00045	07	0079	9 14	4907							
			OBS	150	0	0	376	34	949	27					14	+907							

ENCE	SHIP				- *	MARSDEN	STAT	ION TI	ME			DRIGIN	ATOR	2.2	DEPT	H MAX		WAVE	W	EA-	CLOUD			NDDC	
ID.	CDDE	LATITU		LON	GITUDE E	SOUARE		GM11		YEAR	CRU!		TAT		10 80110	10		ERVA TIONS	- 0	H ER D D E	CDDES		S.	TATION	
	Ev	/ 1 2 /	1/10	// 6	1/10	10' 1'		DAY H			ND		NUM	BFK	_	3 7417 E	-	HGT PER SE	-		TYPE AMT	-			
8007	ΕV	4120	N	05	020 W	150 10			231	1966		09			365	8 19	00	0		X 1	013	1	l	0112	1
						WA		w	IND SPEED	BAR		AIR TE	_		NO D85		ECIAL								
						COLOR	TRANS (m)	DIR.	OR	MET (mb:		DRY	BU	ET COR	DEPT	HS DESER	VATIONS								
						OT	SD	11	505	+	-	133	1	22 7	4.										
1		₁	T			10.	1		1		,	122	1		4			т						-	
	MESSENGR TIME	CAST	CA	RD	DEPTH (m)	т *c	s	٠/	SIGI	VA-T	SPECI	FIC VOLU	ME In?	₹ A D		SOUND	D2 m1/1	PO4-P	TOTA		ND2-N	ND3-N	SI Da-Si	ρH	č
1	HR 1/10											/ W. M. E. I — X.	*	x 10 ³		riociii		μφ · α1/1	νg·	*171	μg - o1/l	yg • o1/1	µg + 01/1		lc l
1																					ļ				
				STO	0000	1196	3.2			95	0.0	3011	12	000		14946									
	23	1	06		0000	1196		855		95						4946									
				STD	0010	1174	3.2		_	97	0.0	2998	06	003	-	14940									
			OE	5 T D	0010 0020	1174 1158	32 32	825		97	0.0			0.07		14940									
	002	2	OE		0020	1158		845		02	00	2956) (I	006		14936 14936									
	002	_	06		0025	1141		825		03						14931									
				STD	0030	1127	32			06	0.0	2919	3	008		14927									
			02		0030	1127		825		06						14927									
			O E	35	0041	1084	32	860	2.5	16						14914									
			OB	35	0042	1095	3 4	885	25	16						14918									
				510	0050	07/3	33			94	0.0	12002	0	013		4804									
			OE		0050	0773		220		94						14804									
			OE		0052	0733		355		10						14790									
			O E		0057 0059	0723 0600		355 410		11						14787 14739									
				5TD	0075	0504	33			61	0.0	01443	a n	018		14706									
			OE		0075	0504		635		61	00	7177	, 0	0 1 0		14706									
			O E		0086	0433		805		82						14680									
				510	0100	0442		07		02	0.0	1052	9	021		14690									
			OE		0100	0442		U70	2.7	0.2						14690									
			OE	35	0104	0458	34	255	2.7	15						14700									
			O E		0107	0388		310		27						14672									
			0.5		0118	0421		345		27						14688									
				5 T O	0125	0380		29		26	00	00830	9	023		14671									
			OE		0125	0380		285		26						14671									
			0 E		0127 0134	0380 0434		470 565		41						14674 14699									
			OE		0146	0480		670		46						14722									
				STD	0150	0509		72		46	0.0	00648	36	045		14735									
			OE		0150	0509		715		46			-			14735									
			OE	35	0153	0520	34	700	2.7	44						14740									
			OE		0160	0498		575	2.7	36						14730									
			0.6		0170	0531		780		49						14748									
			OE		0178	0620		970		52	0.0			0.10		14788									
			O E	510	0200 0200	0530 0530		860 860		55 55	UL	00570) 8	048		14753 14753									
			OE		0230	0519		870		57						14754									
			OE		0246	0539		875		55						14765									
				STD	0250	0537		88		56	0.0	00570	06	031		14705									
			5	STO	0300	0510	34	89	27	59	0.0	00540	9	034	3	14762									
			OE	35	0300	0510	34	885		59						14762									
				STD	0400	0475		94		68	0.0	00469	98	039		14765									
			OE		0400	0475		941		68						14765									
				STD	0500	0453 0453		96		72	U	00444	4 U	044		14773									
			O E	5 T D	0500 0600	0453		956 00		75	0.0	00422	24	048		14773 14789									
			OE		0600	0452		998		75	0.0	0072		0.0		14789									
				STD	0700	0446		01		77	0.0	00414	4.1	052		14804									
			Οť		0700	0446	35	014	27	777						14804									
			5	STD	0800	0426		01		778	0.0	0406	53	056		14812									
				35	0800	0426		006		78						14812									
				STD	0900	0408		99		79	0 (00404	41	000		14821									
				35	0900	0408		993		79	0.0	3.34		2 -		14821									
			OE	STD	1000 1000	0402		00 998		'80 '80	U	00402	20	064		14835 14835									
				5 T D	1100	0381		98		81	0.0	0040	1.7	068		14842									
				35	1100	0381		977		181	0.0		- '	5 + 0		14842									
				STD	1200	0385		99		182	0.0	00403	30	072		14861									
				35	1200	0385		994		182						14861									
				STD	1300	0381	35	00	27	82	00	00406	51	076		14876									
				BS	1300	0381		995		782						14876									
				STD	1400	0381		01		783	0 (0040	75	080		14893									
				BS	1400	0381		005		783		0.07:1	16	na.		14893 14909									
				STD BS	1500 1500	0378 0378		01		784 784	0)(0041	10	084		14909									
			U	00	1 200	9310	30	JU0	2 1	04						10 -									

REFERÊNCE					MARSDEN	STATION	ILME		ORIGINA	TOR*S	DEP	TH MAX		WAVE	WEA-	CLOUO		-	ione	
CTRY ID.	COOE	LATITU	DE LO	MGITUOE HAGE	SQUARE	(GMT	HR,1/10	YEAR C	TZ PZIUS	ATION	BOTT	DEFI	OBSI	RVATIONS	THER	COOES	-	ST	ATION JMBER	
318007	Εv	4120		020 W	150 10	11 12		1966	099		384			0 26	XO.	0 3			0113	
	' '		,		WA		WINO	BARO-	AIR TEM	VIS	NO	. SP	ECIAL	011	1	0.5		1	0113	
					CODE	TRANS. OIR.	SPEED OR FORCE	METER (mbs)	ORY BULB	WET COD	OE PT	. Lancea	VATIONS							
					DT	SD 00	+		133	122 7	3	4								
	MESSENGR	CAST	CARD	DEPTH (m)	T °C	5 ./	SIGA	AA-T 5	PECIFIC VOLUM	€ ∑ ∆ C DYN. A x 10 ³	2.	SOUND	O 2 mt/l	PO4-P	TOTA L-P	NO2-N	NO3-N	\$104-51	рН	ş
	HR 1/10	NO.	TYPE				3.0		ANDMALT-X107	x 10 ³		ELOCITY	07	μg - ot/4	µg • at/l	μg - α1/I	yg - o!/l	yg - at/l	, , , , , , , , , , , , , , , , , , ,	č
			STD	0000	1817	3505	25	30	0026939	000		16170								
	0.30)	085	0000	1817	35050			0020939	000		15170 15170								
			STD	0010	1817	3505	25		0026972	002		15172								
			OBS	0010	1817	35050						15172								
	302	,	STD OBS	0020	1817 1817	3505 35050	25 25		0027006	005		15174 15174								
	002		085	0025	1818	35050						15175								
			STO	0030	1818	3505	25		0027099	008		15176								
			085	0030	1818	35049	25	28				15176								
			5TD 085	0050	1869 1869	3536 35355	25 25		0026134	013		15197								
			510	0075	1523	3540	26		0018041	018		15197 15098								
			085	0075	1523	35400						15098								
			STO	0100	1495	3584	26		0014351	023		15099								
			085 STD	0100 0125	1495 1341	35835 3555	26 26		0013399	0.76		15099								
			085	0125	1341	35545			0013399	026		15050 15050								
			STD	0150	1263	3554	26		0012027	029		15027								
			085	0150	1263	35535						15027								
			OBS	0188	1119	35285						14981								
			STD	0200	1132	3540	27		0010757	035		14989								
			085 085	0200	1132 1040	35395 35295						14989 14960								
			STD	0250	1022	3528	27		0009770	040		14956								
			085	0281	0991	35265						14950								
			STD	0300	0906	3518	27		0008770	045		14921								
			0B5 0B5	0300 0345	0906 0839	35175 35150						14921 14903								
			085	0377	0690	34955						14848								
			STD	0400	0698	3505	27	48	0006757	052		14856								
			085	0400	0698	35050						14856								
			08s 08s	0460 0479	0628 0537	35U20 34854						14838								
			510	0500	0526	3495	27 27		0005401	. 058		14802 14802								
			085	0504	0526	34945			0002.01	. 0-0		14802								
			085	0550	0468	34880	2.7					14786								
			085	0560	0494	34908						14799								
			OBS STD	0565 0600	0468 0458	34927 3493	27		0004815	064		14789 14791								
			085	0600	0458	34928			0004013	. 004		14791								
			STD	0700	0420	3492	27		0004537	068	7 :	14791								
			085	0700	0420	34919			000/223	0.70		14791								
			STD	0800	0421 0421	3496 34963	27		0004321	073		14809 14809								
			STD	0900	0423	3498	27		0004304	077		14827								
			085	0900	0423	34982	2.7	77				14827								
			STD	1000	0401	3497	27		0004206	081		14834								
			OBS STD	1000	0401 0397	34972 3498	27		000/-220	085		14834								
			OBS	1100	0397	34976			0004220	, 005'		14849 14849								
			STD	1200	0398	3499	27		0004222	090		14866								
			OBS	1200	0398	34990						14866								
			STD OBS	1300 1300	0390	3499	27		0004211	. 094		4880								
			SID	1400	0390	34990 3500	27		0004223	098		14880 14896								
			OBS	1400	0388	34997			200 122	5,0		14896								
			STD	1500	0380	3500	27	83	0004193	102	В	4909								
			OB5	1500	0380	34999	27	83				14909								

FERENCE	SHIP	T				E F	MARSDEN	STATION TH	W.E				ATOR'S		DEPTH	MAX		WAVE	WEA-	CLOUD			NODC
IT ID.	CODI	LATI	1/10	LON	GITUDE - 1/10	DAIRT INDC1	SOUARE 10" 1"	IGMTI MO DAY HE	1775	YEAR	CRUISE NO.	S1	TATION		TO BOTTOM	OF S'MPL	000	ERVATIONS	THER	CODES	1	1	TATION
1800	7 FV	400	0 N	0.5	020 W	-				1966	140.			\rightarrow	4407	15	1	2 4	`	0 3	1		
1000	1 - 4	1 -0.	, , ,	100	020 W		WAT	_ +	IND	T .		100		T	NO.			[2]4]	X1	1 013	ı		0114
							COLOR	TRANS. DIR.	SPEED	BARC METE	R D	RY	WET	CODE	OBS. DEPTHS	OBSER	ECIAL VATIONS						
							CODE	lm [FORCE	lmbs			BULB		i								
							DI	SD 12	514	33	5 1	94	133	1	34	L.,			-				_
	MESSEN	GR CAS	CA TY		DEPTH (m)	7 °C	s •/	SIGN	T-AA	SPECIFIC	VOLUA	y.E ₹	△ D IN. M. K 10 ³	SOL	JND	O 2 m1/l	PO4-P ug - 01/I	10141-P ug - 01/1	NO2-N ug - at/l	NO3-N	SI 04-5	
	HR 1/	10				\dashv								x 103		,,,,,,		20.00	Dg - 0171	29 - 001	ا/اם - ور	pg - u.,	·
				TD	000	n l	1869	3536	 25	3.0	002	502	- I	000	1 15	189			1		Į	l	
	0	60	08		000		1869	35360	25		002	J 7 C.) 0	000		189							
			S	TD	001		1889	3542	25	38	002	504	3 0	026		197							
			0.6		001		1889	35415	25				_			197							
	0	0.2	0.6	1D	002		1911 1911	3556 35555	25 25		002	559	8 0	U 5 2		206 206							
	0	0 2	08		002		1913	35625	25							209							
				CT	003		1914	3564	25		002	512	6 0	077		210							
			0.6		003		1914	35635	25							210							
			08	S T D	004		1940 1922	35805 3592	25 25		002	420	а ^	120		222							
			OB		005		1922	3592	25		002	156	0 (120		219							
			08		006		1695	35790	26							154							
			08		006		1737	36300	26	44					15	173							
				TD	007		1727	3637	26		001	550	2 0	174		172							
			08	15 170	007		1727 1620	36370 3619	26 26		001	450	7 0	412		172							
			08		010		1620	36185	26		001	+50	, ,	-12		142							
			S	TD	012		1564	3614	26		001	372	1 0	247		128							
			0.8	5	012		1564	36135	26							128							
			5	TD	015		1479 1479	3596 35960	26		001	325	4 0	281		104							
			0.6	5 TD	015		1380	3582	26 26		001	741	7 0	345		078							
			08		020		1380	35815	26		001	241	, ,	, , , ,		078							
				TD	025	0	1316	3575	26		001			405		064							
				TD	030		1198	3559	27		001	078	7 0	462		031							
			O E	35	030		1198	35590	27							031							
			0 E		031		1168 1179	35545 35585	27 27							021							
				TD.	040		0961	3530	27		000	899	o 0	>61		959							
			OE		040	Ü	0961	35295	27							959							
				TD	050		0787	3515	2 7		000	748	6 0	643		908							
			ÜΕ		050		0787 06 7 2	35150 3515	27 27		000	505	2 0	710		908							
			06	TD ac	060 060		0672	35152	27		000	293	2 4	7710		880							
			0.6		051		0671	35168	27							882							
			O.E		063		0629	35116	27							868							
			0.8	55	067		0612	35147	27							869							
				STD	070		0567	3510	27		000	500	7 0	765		854							
			OE	55 5 7 D	070 080		0567 0527	35104 3509	2 7 27		000	474	0 0	814		854 854							
			0.8		080		0527	35086	27		000			, , ,		854							
			0.6	35	084	U	0510	35086	27	75					14	854							
			0.6		087		0533	35158	2.7							870							
				TD	090		0510 0510	3512 35124	27 27		000	435	8 0	1859		865							
			OE	55 51D	100		0463	3509		81	000	409	7 (901		861							
			0.6		100		0463	35092	27		000					861							
				STD	110	0	0427	3503	27		000	416	8 0	943		862							
			0.6		110		0427	35034	27				2			862							
				STD	120		0410	3502	27		000	415	3 (1984		872							
			01		120		0410 04J0	35U20 3501	27 27		000	417	7 1	.026		872							
			08	STD BS	130		0430	35012	27		000	- 1 (884							
				STD	140	O	0388	3500	27	82	000	417	9 1	.068	14	896							
			08		140		0388	35003	27							896							
				STD	150		0380	3500		83	000	418	5]	1110		909							
			06	5.5	150	U	0380	35000	2.7	60					14	04							

IO.	SHIP	LATIT	UOE 1/10	LON	*GITUDE	PARE	MARSOEN SOUARE	1	ON TIA	YE	A.R	ORIGIN CRUISE NO.	IATOI ITATI MUM	ON	OEPTH TO BOTTOM	MAX. DEPTH OF S'MPL"	085	WAVE ERVATIONS	0.00	CODES		\$1.	ODC ATION IMBER	
8007	Ēγ	402	9 N	05	020 W		150 00				66	10	1	İ	4023	15	13	2 2	x 1	1 1			115	
							WA	_	W	10000	BARO			V15.	NO. OBS.		ECIAL							
							COLOR	TRANS.	DIR.	0.0	(mbs)		BU	LB CODE	DEPTHS	OBSERV	VATIONS							
							DT	SD	15	511	34	0 183	1	39 7	33									
	MESSENG	CAST	CA	RD I	DEPTH		т *с		٠/	SIGMA-	.	SPECIFIC VOLL	ME	₹ ∆ 0 DYN. M.	sou	JND	O2 ml/l	PO4-P	TOTAL=	NO ₂ =N	NO3-N	\$104-\$1		5
	HR 1/1	of NO.	TY	PE	DEFIN	(m)	, ,	,	***	SIGMA-	- 1	ANOMALY-X	07	x 10 ³	VELO	CITY	02 mi/i	yg = at/1	νg - α!/!	μg = 01/l	yg - at/l	μg - o1/I	ρН	C
																							-	\Box
	.i 9	3.5	0.5	STD '	000		1937 1937	35	46 455	2529 2529		002689	0	2000		209								
	0.3	70		55 5TD	001		1937	35		2529		002697	5	0027		209								
			0 E	5.5	001	J	1939		455	2529			-			211								
		,		TD	002		1939	35		2529		002701	0	0054		213								
	10	. 2	08 08		007		1939		455 450	2529 2528						213								
				TD	003		1939	35		2528		002708	12	0081		215								
			08		003		1939		+50	2528						215								
				TD	005		1939	454		2528		002719	2	0135		218								
			08 08	_	005 006		1939 1944		450 450	2528 2527						218								
				TD	007		1620	35		2578		002250	18	0197		191								
			ОВ		007		1820		705	2578						191								
				TD	010		1532	350		2643		001634	. J	0246		109								
			08 08		010		1532 1474		735	2643 2661						109 094								
			S	TD	014		1530	350		2665		001433	4	0284		115								
			08		014		1530		950	2665						115								
			08	S TD	014		1557 1539	36. 360	105	2671 2672		001380	,	0319		128 124								
			08		015		1539		160	2572		001360	4	0319		124								
			0.8		016		1390		710	2677						074								
			ÓВ		017		1436	350		2683						094								
			S 0 B	TD	020		1410 1410	358 358		2686		001262	6	0385		089								
				TD.	025		1236	355		2686 2697		001159	4	0446		089								
				CT	030		1146	354		2706		001085		0502		011								
			08		030		1146	35-		2706						011								
			08	S TD	032		1133 0891	359		2710 2725		000908	/-	0002		011 931								
			08		040		0891	351		2725		000700	4	0002		931								
			08		048		0699	340		2742					14	869								
			08	S TD	049		0719 0699	350		2744		000710		0.01		880								
			08		050		0699	350 350		2744		000728	0	0684		872 872								
				TD	060		0549	349		2761		000564	U	0748		829								
			08		060		0549	349		2761					14	829								
			08	S TD	068		0499 0559	349 35]		2768 2772		000479	2	0800		823 851								
			08		070		0559	351		2772		000479	U	0000		851 851								
				TD	08C		0541	351		2775		000458	5	0847		861								
			08		080		0541	351		2775						861								
			08	TD.	090		0475 0475	350 350		2776 2776		000446	5	0893		849 849								
				TD	100		0441	350		2779		000423	7	0936		852								
			08		100		0441	350		2779						852								
				TD	1100		0426	350		2781		000412	6	0978		862								
			QB 5	S TD	1100		0426	350		2781 2782		000410	3	1010		862								
			08		1200		0409	350		2782		000410)	1019		872 872								
			5	TD	130	0	0399	350	1	2782		000419	4	1060		884								
			08		130		0399	350		2782					148	884								
			08	T D	140		0391 0391	350 350		2782 2782		000417	4	1102		897 897								
				TO	150		0380	350		2783		000413	4	1144		910								
			ÓВ	S	150	O	0380	350	07	2783						910								

	HIP	LATITUDE	LONGITUDE	DCTR	MARS SQU		STA	TION (GM1		YEAR	CRUISE	ORIGINATOR'S STATION	Ţ	OEPTH TD	MAX. DEPTH OF	01	SERV	VE A TIC)NS	WEA- THER		DES	NODC STATION
CODE NO. CO	DE	1/10	1/10	ΔZ	10*	1.	MO	DAY	HR_1/10		NO.	NUMBER	1	BOTTOM	S'MPL'S	DIR	НG	PER	SEA	CDDE	TYPE	AMI	NUMBER
318007 E	V	3950 N	05020 W		114	90	11	12	128	1966		102		5486	15	1 :	2	4		ΧO	0	3	0116
					F	WA	TER	1	WIND	BARC)- <u> </u>	AIR TEMP. C	15.	NO.	SPEC	IAL]						

WA1	ER	W	/IND	BARO-	AIR TE	MP. ℃		NO.	SPECIAL
COLOR	TRANS.	DIR.	SPEED OF FORCE	METER (mbs)	DRY BULB	W E T BULB	CODE	OBS. DEPTHS	OBSERVATIONS
DT	SD	15	513	328	189	150	7	44	

			DT	SD 15	513 32	8 189 1	50 7	44								
MESSENGR CAST TIME OF NO. HR 1/10	C ARD TYPE	OEPTH (m)	T *C	s ·/.	SIGMA-T	SPECIFIC VOLUME ANOMALY—X107	≨ Δ D DYN. M. x 10 ³	SOUNO	O2 ml/l	PO 4-P µg - 01/I	TOTAL=P µg = at/l	NO2-N ug - 01/1	NO3-N µg - al/l	SI O 4-Si ug - at/1	рН	5 C C
	5.7.0	0000	17.7	34.31	3 . 0 1	0011515	0000	15141		1	ļ			1 1		
128	OBS	0000 0000	1752 1752	3421 34213	2481 2481	0031515	0000	15141 15141								
120	STD	0010	1749	3421	2481	0031478	0031	15142								
	OBS	0010	1749	34213	2481			15142								
002	085	0018	1750	34220	2482	0030105	0373	15144								
	\$ T D QB S	0020 0020	1778 1778	3449 34487	2495 2495	0030185	0062	15156								
	065	0025	1808	34560	2493			15166								
	STD	2030	1825	3482	2509	0028599	0092	15175								
	OES	0030	1825	34820	2509			15175								
	OBS	0044	1848	35020	2519	0035965	0148	15186 15157								
	STD 08S	0050 0050	1751 1751	3486 34860	2530 2530	0026946	0140	15157								
	STD	0075	1396	3526	2641	0016475	0202	15056								
	085	0075	1396	35255	2641			15056								
	OBS	0084 0100	1442	35710 3546	2665	00.6363	0 < 6.1	15078 15051								
	STD OBS	0100	1360 1360	35455	2664 2664	0014363	0441	15051								
	STD	0125	1269	3545	2682	0012733	0274	15024								
	OBS	0125	1269	35445	2682			15024								
	STD	0150	1220	3543	2690	0012021	0305	15011								
	085 035	0150 0173	1220 1150	35425 35255	2690 2690			15011 14989								
	085	0189	1181	35455	2700			15005								
	STD	0200	1165	3546	2703	0010914	0363	15001								
	085	0200	1165	35455	2703			15001								
	STD STD	0250	1055 0940	3532 3521	2712 2723	0010070 0009096	0415 0463	14969 14934								
	OBS	0300	0940	35205	2723	0007070	0405	14934								
	STD	0400	0696	3505	2748	0006729	0542	14955								
	085	3400	0696	35050	2748			14855								
	085 085	0440 0478	0597 0612	34920 35020	2751 2 7 57			14821 14834								
	085	0490	0565	34970	2759			14817								
	STD	0500	0616	3496	2752	0006451	0608	14839								
	0B5	0500	0616	3515P	2767P			1								
	085 085	0511 0530	0545 0540	34950 34945	2760 2761			1481z 14813								
	085	0539	0612	3525P	2776P			14010								
	OBS	0556	0540	35000	2765			14818								
	085	0561	0580	3514P	2771P											
	OBS STD	0578 0600	0539 0539	34995 3507	2765 2770	0004801	0564	14821								
	085	0600	0539	35065	2770	000.001	0004	14826								
	OBS	0610	0568	35145	2773			14840								
	STD 085	0700 0700	0539 0539	3512 35116	2774 2774	0004550	0711	14843 14843								
	085	0730	0502	35067	2775			14832								
	085	0746	0528	35145	2778			14847								
	STD	0800	0507	3511	2777	0004332	0756	14846								
	085 085	0800 0838	0507 0495	35106 3510P	2777 2778P			14846								
	085	0856	0445	35005	2776			14830								
	OBS	0876	0472	35068	2778			14844								
	STD	0900	0440	3502	2778	0004225	0798	14834								
	085 STD	0900 1000	0440	35021 3501	2778 2780	0004137	0840	14834 14843								
	OBS	1000	0420	35013	2780	3004137	0040	14843								
	SID		0399	3500	2781	0004068	0081	14850								
	085 ST0	1100 1200	0399 0392	35J00	2781	0004373	0922	14850								
	088	1200	0392	35000	2782 2782	0004013	9722	14864 14864								
	STD		0382	3500	2782	0004059	0962	14877								
	OBS	1300	0382	34997				14877								
	STD		0373	3499 34990	2783	0004082	1003	14890								
	SID	1400 1500	0373	3499b	2783 2764	0004072	1J44	14890 14907								
	085	1500	0373	35003		000,012		14937								

3.	SHIP	LATITU	DE	LONGIT	0 ∓	MARSOEN SQUARE	STATION	1	YEAR	CRUISE		ATION	4	DEPTH	OF	OBS	WAVE ERVATIONS	WE	ER L	CODES			NOOC
o.			1/10	•			MO DAY			NO.		JMBE	`	BOTTO	" S'MPL	9.11	HGT PER SE		-+'	YPE AMT			UMBER
07	ΕV	3420	N	0502	20 W	114 90	11 12	175	1966	1	103			544(15	13	8 4	X	1	0 3			011
						WA	7	WIND	BAR	J-	IR TEM		VIS.	NO. 085.	SPE	CIAL							
						COLOR	TRANS. OH	SPEED OR FORCE	MET!		DRY	WET	CODE	DEPTH!	S OBSERY	2 NOIT AV							
						DT	50 1			0 2	11	17.	2 8	30	1								
Г		1 3					 				!	Τ.	< A D	Τ	1		1		\top	. 1			T
ľ	MESSENGR TIME C	CAST NO.	CAR	0 0	DEPTH (m)	τ *c	s */	SIGA	T A A	SPECIFIC	VOLUM)* d	E △ D DYN. M. x 10 ³		OCHTY	03 ml/l	PO4-P	TOTAL-		(O3N g + al/l	NO3-N ug - at/l	\$1 O4-5	
- 1	HR 1/10		-			+		-					X 10*	+			1		+-			-	+
			ς.	TD	0000	2218	3624	25	1.2	002	8489	١,	0000	1,	5293								l
	175	5	OB:		0000	2218	3623			002	0.0.		0000		5293								
				T D	0010	2218	3524	25		002	8528	3 1	0029		5295								
			QB:	S	0010	2218	3623	5 25	12					1 5	5295								
				T D	0020	2218	3624		12	002	8566	5	0057		5296								
	002	2	OB.		0020	2218	3623		12						5296								
			08		0025	2217	3623			003	0 5 7		0000		5297								
			08:	T D s	0030	2217 2217	3624 3623		13	002	8578)	0086		5298 5298								
				T D	0050	2217	3626		14	002	8538	3 1	0143		5302								
			0B		0050	2218	3625						_		5302								
			0B:	S	0062	2217	3626								5303								
			08		0066	2133	3605								5280								
			08:		0070	2194	3660						0.110		5303								
			0B:	T D	0075	2170 2170	3655 3655		50 50	002	5220)	0210		5297 5297								
				1 D	0100	1987	3657		01	00.2	0423	4	0467		5253								
			0B:		0100	1987	3657			002	0 7 2 -		0 - 0 1		5253								
				T D	0125	1889	3661		30	001	7780	,	0315		5230								
			0B:	S	0125	1889	3661		30						5230								
				T D	0150	1826	3654	26		001	6894		0 3 5 8		5215								
			08		0150	1826	3653								5215								
			OB:	S 1 D	0170	1770 1778	36441 3655		47 53	001	5852	,	0440		5201 5210								
			08:		0200	1778	3654			001	2022	_ '	0440		5210								
				T D	0250	1725	3647		60	0.01	5322	2 1	0518		5202								
				TD	0300	1625	3630		71		4415		0592		5178								
			08		0300	1625	3630.							13	5178								
				I D	0400	1286	3569		97	001	2038	3 1	0725		5078								
			0B:		0400	1286	3568			0.00					5078								
			0B	T D	0500 0500	0979 0979	3525 3524		20	000	9858	3	0834		4981								
			08		0588	0623	3483		20 41						4981 4855								
				T D	0500	0664	3498		47	000	7138	3 1	0919		4875								
			0B		0600	0664	3497						-		4875								
			0B:	5	0639	0626	3495		50					14	4866								
			08		0650	0699	3520		60						4900								
				(1	0700	0661	3515		61	000	5934	+ 1	0984		4892								
			08:	5 TD	0700	0661 0609	3515 3515		68	000	5355		1041		4892 4888								
			0B		0800	0609	3515		68	000	,,,,,	,	1041		4888								
			OB:		0866	0530	3507		72						4866								
			08		0889	0558	3514		74						4882								
			S	T D	0900	0540	3511	27	74	000	4845	5	1092		4877								
			08		0900	0540	3511		74						4877								
				TD	1000	0496	3510		78	000	4475)	1138		4875								
			08	S TD	1000	0496 0439	3509° 3502		78 78	000	4402	2	1183		4875 4867								
			0B:		1100	0439	3502			000	4402	-	1103		4867 4867								
				TD	1200	0414	3501		80	000	4314	4	1226		4873								
			OB:		1200	0414	3500		80						4873								
			5	T D	1300	0390	3499	27	81	000	423	3	1469	14	4880								
			08		1300	0390	3498								4880								
				TD	1400	0383	3499	2.7		000	4232	2	1311		4894								
			08	S TU	1400	0383 0377	3498 3499			000	6373	,	1 3 5 7		4894								
				10	1700	0311	2477	27	06	000	424]	1	1354	4.4	4908								

REFERENCE	SHIP	LATITL	DE	LON	GITUDE	DAIFT	MARSOEN SQUARE	STATION	TIME	YEAR			ATOR'S		OEPTH TO	I OEF I	OB	WAVE SERVATIONS	WEA-	CLOUD			NODC
CODE NO.	COOF	•	1/10		1/10	NO N		MO DAY			CRUISE NO.		MATION		BOTTO	V S'MPL'	DIR	HGT PER SE	CODE	TYPE AM	1		NUMBER
31800	7 EV	3850) N	051	020 W		114 80	11 12	208	1966		10	4		546	5 15	13	3 2	X 2	0 3			0118
							WA	TER	WINO	BARC			MP. °C	vis	NO.	SPE	CIAL						
							COLOR	TRANS. DIF	SPEE OR FORG	D	RIC	DRY ULB	WET	COD	OBS. OEPTH	OBSERV	ATIONS						
							DT	SD 1				11	17	+	29								
		т—	1			1		1 30 1	32	0 1 21			Ц,		٠,			<u>'</u>					T
	MESSENGI TIME	CAST NO.	CAI	RD PE	OEPTH	(m)	T *C	s ·4.	\$10	SMA-T	SPECIFIC	VOLU	ME 6	∆ 0 YN. A X 10 ³	. SO	LOCITY	02 ml/	PO4-P	101AL-P	NO2-N µg - ai/l	NO ₃ =N yg - σi/l	\$1 04-5 µg - a1/	Hq PH
	HR 1/10	-	-					-						X 10-		-		-					+
			(ι	000	n 1	2232	3635	1 2	517	002	805	.8	000	o 1	5298 ¹				'	I	l	1
	20	8	08		000		2232	3634		517	000					5298							
		_		TD	001		2232	3635		517	002	809	7	002		5300							
			08		001		2232	3634		517						5300							
	20	2		TD	002		2232	3635		517 517	002	813	6	005		5301 5301							
	00	2	0B 0B		002		2232	3634 3634		517						5302							
				TD	003		2232	3635		517	002	817	5	008		5303							
			ОВ		003	0	2232	3634	7 2	517						5303							
				TD	005		2232	3635		517	002	825	3) 1 4		5306							
			OB	S TD	005 007		2232 2232	3634 3636		517 518	002	825	6	021		5306 5311							
			0B		007		2232	3636		518	002	. 02)				5311							
				TD	010		2161	3672		565	002	386	5	127	7 1	5301							
			08	S	010	10	2161	3671		565						5301							
				TD	012		2031	3669		598	002	078	39) 3 3		5270							
			08		012		2031 1945	3668 3664		598 617	001	904	. 7	38		5270 5250							
			0B	TD	015 015		1945	3664		617	001	. 704	• ′	000		5250							
				10	020		1839	3657		640	001	711	.5	047		5228							
			ОВ		020		1839	3657	2 2	640						5228							
			S	TD	025	Ū	1812	3657	2	646		1665		055		5228							
				TD	030		1785	3655		651	00	1634	+0	063		5228							
			08		030		1785 1735	3654 3647		651	00	1605	. 1	080		5228 5229							
			08	TD C	040		1735	3647		658	00.	.00.	, 1	000		5229							
				TD	050		1651	3632		666	00	1554	47	045	9 1	5219							
			08		050	Ü	1651	3631	6 2	666						5219							
				TD	060		1376	3583		689	00	1339	92	110		5143							
			05		060		1376	3582		689	0.0	1106				5143							
			08	TD	070		1088	3541 3540		713	00.	1105	0.6	1 4 2		5056 5056							
				5 T D	080		0847	3514		733	000	906	81	132		4980							
			0 E		080		0847	3513		733			-			4980							
			0 E	35	981		0813	3510		736						4969							
			0.6		081		0827	3512		735						4975							
			OE	_	083		0723 0641	3504 3501		744	00	0698	Ω 7	140		4938							
			0.6	STD	090		0641	3501		2753	00	007	0 1	1.0		4916							
			O E		094		0556	3496		2760						4888							
			OE		091	75	0568	3502		2764						4899							
				STD	100		0538	3501		766	00	057	22	147		4891							
			0.6		100		0538	3500 3496		2766 2772	0.0	050;	2.0	152		.4891 .4871							
				STD BS	110		0451 0451	3496		2772	0.0	000	2 V	2		4871							
				55 5TD	120		0451	3501		2775	00	048	99	157		4894							
				35	120		0463	3501	2 i	2775						4894							
				STD	130	00	0445	3501		2776	0.0	048	0.8	162		4903							
				35	130		0445			2776	0.0	066	76	167		14903 14910							
				STD	140		0421	3499 3499		2778 2778	00	046	10	IO		L4910 L4910							
				BS STD	140		0412	3500		2779	00	046	29	171		4923							
				BS		00	0412	3499		2779						14923							

PEFERENCE					_ =	MAR		STATION T	MĒ			RIGIN	A TOR'S		7	DEPTH	MAX.		WAVE	WEA-				NO	oc l	
CTRY ID.	CODE	LATITU		LONGITUOI		SOU	ARE	(GMT)		YEAR	CRUISE NO.		TATION		7	01 MO110	DEPTH OF	00,	ERVA TIONS	THER	CODES			STAT	ION [
			1/10	-1/	10	10	1	MO DAY F			NO.			R	+		S'MPL"		HGT PER SE	-	TYPE AM				-	
31/800	1 EV	3820	N	05020	W	114	80 WAT		004 VIND	1966	1	10	UP. °C		با	490	15	13	5 2	X 2	0 3			0.	119	
							COLOR		SPEEC	BARC	/• h	RY	WET	- VIS		NO. OBS.	SPE	CIAL								
							CODE	FRANS. DIR.	FORC		i Bi	JL8	BULB		1	SHTPS	003574	A 110143								
							DT	SD 10	\$3.	2 29	5 2	11	17	8 7		32										_
	MESSENG	CAST NO.	CAR	O DEPT	H (m)	Т	"c	s ·/	SIG	MA-T	SPECIFIC	VOLU	ME E	≨ ∆ [D M.	SOU		O 2 m1/(PO ₄ -P	101AL-P	NO ₂ -N	NO3-N			ρН	š
	HR 1/1	1 10.	117	t					-				_	x 103	3	V110	CIII		μg - 81/1	μg - α1/I	µg - at/l	yg - 01/1	hů -	01/1		C
				_			21.				0.0	n 3 c	_	0.30	_	1	200		1				1	1		
	0.0		0 B		000		2240 2240	3633 36332		514 514	002	838	3	000	0		300 300									
	00				10		240	3633		514	002	842	2	002	8		302									
			ОВ		10		240	36332		514							302									
					020		2240	3633		514	002	846	1	005	7		303									
			OB	_	020		2240	36332 36332		514							303									
			08)25)30		242	3633		513 513	002	855	4	008	5		305 305									
			08		30		242	36332		513	002	0					305									
				TD O	150	2	2244	3633	2	512	002	868	6	0 1 4	. 3	15	309									
			ОВ)5U		244	36332		512							309									
			S 08)75)75		2244	3633 36332		512 512	002	878	4	021	4		313 313									
					100		2241	3633		513	002	879	Q	028	16		317									
			ОВ		00		241	36332		513	002						317									
					125		185	3662		551	002	533	0	5 د ن	4		310									
			08		25		2185	36617		551							310									
			S 08		150 150		2009	3667 36666	_	603 603	002	047	2	041	1		268 268									
					200		1860	3659		635	001	750	8	050	16		234									
			08		200		1860	36588		635							234									
					250		829	3658		643	001			059			233									
					300		1800	3657 36568		649	001	655	4	067	6		233									
			OB S		• 00		1800 1 74 7	3649	_	649 656	001	616	.a	084	. ^		233 233									
			ОВ		00		1747	36494		656	001	010		00.4			233									
					000		1700	3642		662	001	591	6	100	0		235									
			OВ		000		1700	36422		662					_		235									
			5 08		00		l548 l548	3611 36106		673 673	001	505	1	115	5		201 201									
					700		1342	3576		691	001	345	7	149	8		147									
			08		700		1342	35757		691		_		•	-		147									
			S		300		1074	3539		714	001	118	0	142	1	15	067									
			ОВ		300		1074	35386		714							067									
			S 08		900)839)839	3513 35127	_	733	000	919	13	152	3		994 994									
					000		578	3493		733 754	000	686	8	160	13		906									
			05		300)578	34925		754	000				-		906									
			08	S 1	88		470	34832		760							875									
					100)493	3491		763	000	596	8	106	7		888									
			0B 0B		100 160)493)454	34906 34899	-	763 767							888 882									
			06		172		0470	34947		769							891									
					200		1452	3493		769	000	539	3	172	4		888									
			ОВ		200		1452	34925		769							888									
			08		211)440	34900		769							884									
			0B 0B		242 251		0470 0434	34983 34906		772 770							903 889									
					300		0413	3500		779	000	446	. 2	177	13		889									
			ОВ		300		0413	34996		779			-	- '	-		889									
			ОВ		325		0411	34994		779						14	893									
			08		389 400	(J467P	35016 3500	2	775P																
			0 B		+00	()449P	34996	2	775P																
			08		490			34990		776P																

REFERENCE	SHI		_		- #	MAR	SDEN	STATION TIA	AE .		OR	IGINA	TOR'S		DEPTH	MAX.	200	WAVE SERVATION	,	WEA-	CLOU	D			NODC TATION
CTRY ID.	COD		LATITUDE		NGITUDE 50	SQU		IGMTI		YEAR	CRUISE NO.		A TION J M BER		TQ MQTTOB	OF S'MPL"	00	HGT PER		CODE	TYPE A				MARES
31800	7 EV	.,-	3750 /		17.10	10*	+ +	MO DAY HR		1966	10.	106		-+	5486	14	12	+	31.4	Х6	_	3			012
2 10 00	1 -1	v	2130 1	4 0:	5020 W	114	1			1900		TEM		_		14	1.2	اكاكل		1 ^0	01	ا د			012
							COLOR	T -	SPEED	BARC METE)· —			VIS.	NO. QBS.	SPE	CIAL ATIONS								
							CODE	TRANS. DIR.	FORCE			В	8118	CODE	DEPTHS	OBSEK	A IIQII 3								
							DT	5D 12	545		0 20	6	183	6	26										
	ALESSE	ENGR DI			1			1			SPECIFIC Y	/01114	, \$	Δ. M.	SOU	IND		PO4-P	Τ,	OTAL-P	NO2-1	J NO	3-N	S1 O4-S	
	TIM	NE OF	NO.	CARD	DEPTH (m)	T	*C	s ./	SIGA	1-AA	ANDMAL	Y-X10	, DY	10 ³	VELD	CITY	0 2 ml/	yg • 01/1		ו/וס • פע	µg • al.	י פע	at/I	yg - at/	
	HR 1	1/10	-		-	-									+				+			+	_		
	1	1		STD	0000	1 2	215	3633	25	20	0027	744	- 00	000	1 15	293			J	1		1	1		1
	(039	(085	0000		215	36327	25							293									
				STD	0010		214	3633	25	20	0027	756	0 (28		295									
			(085	0010		214	36327	25							295									
				STD	0020		214	3633		20	0027	795	0 0)56		297									
	C	002		085	0020		214	36327		20						297									
			(DBS	0025		208	36327		22	0037	15 7 7		303		296									
			,	STD	0030		202	3633 36325	25 25		0027	525) ()	083		295 295									
				085 085	0040		128	36253		39						277									
			(STD	0050		121	3631		45	0025	584	٠ ،	136		277									
			(085	0050		121	36307		45	002	, , , , , , ,	, ,	1) (277									
			Ì	STO	0075		117	3635		49	0025	249	9 0	200		281									
			(DBS	0075		117	36352		49						281									
				STD	0100	2	105	3639	25	56	0024	+726	5 0	262	1.5	282									
			(286	0100	2	105	36394	25	56					15	282									
			(0B5	0108		096	36416		60						281									
				SID	0125		949	3655	-	00	0019	728	8 0	318		246									
				085	0125		949	36547		09						246									
			(DBS	0131		877	36565		29	001	777	•	2 / /		227									
				STD OBS	0150 0150		848	3655 36547		35	001	133	/ 0	364		222									
			,	STD	0200		794	3657		50	0016	OBI	0	448		215									
				OB5	0200		794	36566		50						215									
				STD	0250		782	3656		53	0016	010	0 0	528		219									
				5 T D	J300]	765	3654	26	55	0015	937	7 0	508	15	222									
			4	085	0300		.765	36538	26	55						222									
				STD	0400		717	3646		61	0015	738	9 0	766		224									
			1	085	0400		717	36456		61	0011			0 3 -		224									
				STD	0500		668	3638		67	0015	46	1 0	922		225									
			1	OBS STD	0500 0600		.668 .523	36382 3609		78	0014	4600	n 1	073		193									
				085	0600		1523	36092		78	001	, 500	<i>y</i> 1	U I .		193									
				STD	0700		1354	3574		91	001	346	b 1	د 1 3		151									
				085	0700		1354	35790		91		,				151									
				STD	0800		1143	3549		09	001	172	5 1	339		093									
				085	1800		143	35488		0.9						093									
				5 1 D	0900		2000	3517		27	000	794	ے 1	447		018									
				0.82	0900		902	35168		27			_	, -		018									
				STD	1000		701	3504		47	000	184.	< 1	536		956									
				OBS	1000 1100)701)597	35∪37 35∪3		60	0006	.401	g 1	6 08		956									
				SID	1100		1597	35030		60	0000	J47	, 1	- 00		932									
			,	SID			0480	3496		768	000	5544	4 1	568		900									
				085	1200		0480	34955		68			-			900									
				STD)431	3495		73	000	0034	4 1	721		896									
				085	1300		0431	34950	27	773						896									
				085	1370	()444	35014	27	77					14	914									

REFERENCE						SDEN		ATION TI			_	0.010	161.6	TOR'S	_			MAX.		WAVE	1	CLDUD		-	
CTRY ID.	CDDE	LATITU	DE	LONGITUDE	SOL	BRAI	31	(GMT)	ME	YEAR	c	RUISE	_	ATION	\dashv		D [DEPTH	OBS	ERVATIONS	WEA-	CODES		5	NDDC TATION
CODE ND.			1/10	1/10	10*	1.	MD	DAY H	R.1/10		1	ND.	ΝĮ	MBER	_	8011	TOM S	'MPL'S	DIR	HGT PER SEA	CODE	TYPE AM	1	N	UMBER
318007	EV	3719	N	05020 W	114		11		77	1966	6		07			54	46	15	14	8 2	X 2	0 3		- 1	0121
						WA	_	_	SPEED	BAS			TEM	P. °C	vis.	NE	D.	SPECI							
						CDLOR	TRA	S. DIR.	OR	1		DRY BULB		W ET	COO	DEP	THS	BSERVA	TONS						
						DT	S	D: 11	540		64	206	, †	172	8	2	\rightarrow								
	MESSENCE		·				1	1	T		1			-		1			!	T					
	MESSENGR TIME	H NO.	CARD	DEPTH (m)	1	*C		s ·/	SIG	MA-T	13	PECIFIC VO	-x10,	P. DA	∆ D N. M	١. ,	VELDC		2 m1/l	PO4-P pg - 01/I	TOTAL-P pg - at/I	NO2-N 29 - αl/l	NO3-N ug - at/l	\$1 O4=\$1 ug = a1/L	рН
	HR 1/10				}		+-		+		+-			+ ^		+		-		++			-	ļ .	_
	Ī	1	ST	D 0000	1	049	1	633	2 6	67	I	00233		2 0	000		152	F 0			-			l	1 1
	077	,	OBS			2049		6333		67		0023			000		152								
			5 T			049		633		67		00233	80	0 0	J 2 3		152								
			OBS	0010		049		6333		667							152	52							
			ST			049		633		67		00234	17	7 00	347		152								
	002	-	085	0020		049		6333		67							152								
			085 ST	0025		049		6333 633		667		00234		0.00	70		152 152								
			085	0030		050		6333		66		00234	000	, ()	J 1 (152								
			ST			050		633		666		00235	62	2 0	117		152								
			OBS	0050		050		6332		666					-		152								
			ST			051		633	25	66		00237	09	9 0	176	5	152	63							
			085	0075		051		6328		66							152								
			085	0090		051		6330		66							152								
			5 TI 0 B S	0100 0100		970		657 65 6 7		05		00200	1 /	/ 0.	231		152								
			ST			892		659		27		00180	120	a 0.	279		152 152								
			OBS	0125		892		6587		27		00150	123	, 0.	4/7		152								
			ST			840		657		39		00169	63	3 0.	322		152								
			085	0150	1	840	3	6572	26	39							152	20							
			ST]	.789	3	655		550		00160	9 6	3 0	405	5	152	13							
			085	0200		789		6547		50							152								
			ST			.770		653		553		00159			+85		152								
			ST			749		650		56		00158	20	0:	64		152								
			085 ST			749		6502 643		56 62		00166	. 0 1		7 2 1		152								
			085	0400		701		6426		62		00155	8 1	ı U	721		152 152								
			ST			610		625		70		00151	19	0.8	375		152								
			085	0500		610	3	6246		70			-	-			152								
			ST		1	485	3	603	26	82		00141	97	10	22	2	151	80							
			OBS	0600		485		6033		82							151								
			511 0BS			404		595		93		00133	67	1.	159		151								
			51	0700		296		5948 575		700		00128	21.	. 1	290		151								
			085	0800		296		5750		700		00120	. 54	. 14	- 90		151								
			51			040		534		717		00110	185	14	+10		150								
			085			040		5344		17			•	•			150								
			ST		C	826		514		736		00090	94	1:	11		150								
			085	1000		826		5136		36							150	06							
			OBS	1030		720		5029		743							149								
			ST			633		504		756	(00069	79	1 :	91		149								
			OBS ST	1100 0 1200		489		5036 492		756 764		00050	4.7	. 14			149								
			085	1200		489		4917		64	,	00059	44	10	56		1490								
			ST			459		494		770	(00054	49	1	713		149								
			085	1300	C	459	3	4944		770							1490								
			51			453		500	27	75	(00050	98	17	766		149								
			OBS	1400		453		4995		75							149								
			STO			447		502		77	(00049	56	10	16		149								
			OBS	1500	C	447	3	5017	21	77							149.	31							

TABLE V. Observed and interpolated oceanographic data taken by USCGC ROCKAWAY on North Atlantic Standard Monitoring Section 6, 19-22 November 1966; prepared from NODC listing No. 31-1061.

10. 00	HIP LATIT			SITUDE S	SO!	RSDEN JARE		ION TI		YEAR	CRUISI	ORIGIN E S	TATION		OEPT TO BOTTO	2	TH (ATIONS	WEA- THER CODE	CODE	5		NODC STATION NUMBER
NO.		1/10		1/10	10*	1.	MO	DAY	R.1/10		NO.		UMBER		10110	2,WI	PL"S DII	L HG1	PER SE	4	TYPE A A	IT.	-	140101061
1061 R	C 320	1 N	065	21 W	1115	25	11	19 1	179	1966	A62	2 00	1		420	6 4	1 1	0 3	4	X 1	8 2	1		000
	'				,	WA	TER	V	VIND	BAR	o- L	AIR TE	ИР. °C		NO.		PECIAL	٦.						
						COLOR	TRANS	DIR.	SPEED	MET	ER	ORY	WET	COD	DEPT	0.000	RVATION	15						
						CODE	(m)		FORC	[[mbi	s) (BULB	BULB	-	DEFI	n.,		_						
								12	505	20	7 2	222	183	7	19									
	SSENCE						1					IC VOLU	5	A D	Ή.	SOUND	T	·Т.	PO4-P	TOTAL-P	NO2-N	NO3-N	SI O4-5	r
	SSENGE CAST	CAI	PE	DEPTH (m)		1 °C	2	•/	SIG	MA-T	ANON	MALY~X	ç;' □	YN. M	1. V	ELOCITY	02 n		g + ot/1	μg • at/l	μg - ot/L	μg - α1/1		
HR	1/10	-			-		+		+					x 10 ³			+	-			-			+
			_		- 1			_			1		. 1 .		Ι.	_			- 1				1	1
			TD	0000		2340	36			04	002	2932	2 0	000		5328								
	179	ОВ		0000		2340		583		04					_	5328								
			TD	0010		2339	36			07	002	2899	8 0	029		5330								
	179	ОВ		0011		2339		635		8.0				_		5330								
			TO	0020		2339	36			8 0		2897		058		5331								
			TD	0030		2338	36			8.0	004	2898	5 0	087		5333								
	179	0 B		0032		2338		639		8.0						5333								
			T D	0050		2333	36			09	002	2899	1 0	145		.5335								
	179	OB	-	0054		2332		624		09						5335								
			TD	0075		2054	36			88	002	2160	4 0	208		.5267								
	179	ОВ		0081		2000		631		02			_			5254								
		S	ŢD	0100		1919	36	59	26	20	001	1858	2 0	259		.5234								
	179	06	S	0107		1896		584	26	26						.5229								
		S	TD	0125		1868	36	57	26	32	001	1756	7 0	304	. 1	.5224								
		S	TD	0150		1839	36		26	38	001	1709	8 0	347	' 1	.5219	1							
	179	ОВ	S	T0162		1828	36	549	26	41					1	5218								
		S	TD	0200		1812	36	54	26	44	001	1668	3 0	432	1	5220	1							
	187	ОВ	S	0209	:	1808	36	540	26	45					1	5220	1							
		S	TD	0250		1789	36	52	26	48	001	1646	6 0	514	1	5221								
		S	TD	0300		1766	36	48	26	51	001	1638	1 0	597	1	5222								
	187	08	S	0313	:	1760	36	471	26	51					1	5222								
		S	TD	0400		1721	36	40	26	55	001	1623	6 0	760	1	.5224								
	187	08	S	T0418		1709	36	381	26	57					1	.5223								
		S	TD	0500		1621	36	21	26	65	001	1562	8 0	919	1	5208	l .							
		S	TD	0600		1504	36	00	26	75	001	1484	9 1	071	. 1	5186	,							
	187	ОВ	S	0629		1468	35	942	26	79					1	5178								
		S	TD	0700		1402	35	0.8	26	82	001	1439	6 1	218	1	5167	,							
		S	TD	0800		1257	35	60	26	96	00	1313	4 1	355	1	5133	}							
	187	08		10841		1180		514		04						5112								
		S	TD	0900	(996	35	37	2.7	27	001	1010	4 1	471	. 1	5055								
			TΩ	1000	(733	35	16		52		743		559		4970								
	187	ОВ		1056	(0613	35	072		61						4931								
			ΤO	1100		0595	35			64	000	0617	7 1	627		4931								
			TD	1200	(0557	35	0.7		68		0576		687		4933								
			TD	1300		1523	35			72		3547		743		4935								
			TO	1400		1492	35			75		0523		797		4939								
			TD	1500		1464	35			77		0502		848		4945								
	187	80		T1588	(1443	35	036		79						4951								
			TD	1750	(0417	35	01	27	80	000	1483	4 1	971		4967								
		S	TD	2000	(381	34	98	27	81	000	0476	9 2	091	. 1	4994	,							
	195	08	S	T2049	(375	34	979		82						5000								
			TD	2500		330	34			85	000	0449	5 2	323		5057								
	195	08		T2572		323		964		86						5067								
			TD	3000		281	34			87	000	0437	5 2	544		5122								
	195	08		3067		275		927		87			_			5131								
	195	ОВ		T3559		0234		896		88						5199								
			TD	4000		2222	_	89		89	000	0422	5 2	974		5271								
	105	OB		T4074		3222		000		9.0			_			6201								

T4074

195

0222 34888 2789

NCE	SHIP	LATITU	1	ONGITUDE 1	san	SDEN I ARE	STATION KDI	AT)	YEAR	UNU		STATI	ON	DEPT TO BD1TC	OF	H DB	WAV SERVA	IONS	WEA- THER CODE	CLOUD		S.	NODC TATION UMBER	
NO.		<u> </u>	1/10	1/10	10*	1.	MO DA	/ HR.1		N		NUM	BEK	-	SMPI		+ +	ER SEA	1	TYPE AM	-	-		
061	RC	3158	N 06	5619 W	1115	16	11 20	100	3 196	6 A6	_			466	3 1.5	10	3 4	+	X O	0			00021	
						WA.		WIN		ARO-	AIR TE	_	VIS	NO.	Sf	ECIAL								
						COLOR	TRANS. C	HR.	OR I.	ETER mbs)	DRY BULB	W	ET COD	DEPT		PATIONS								
						COOE		-	FORCE	_		+-	-	+	+		1							
							0	0 9	500 2	08	214	1	74 7	14	_l		<u></u>							$\overline{}$
	MESSENGR	CAST	CARD		Π.	°c	5 ./	- 1		SPEC	IFIC VOLU	3 ME	₹ △ 0		DUND	O2 m1/	PO	4-8 1	TOTAL-P	NO2-N	NO3-N	51 04-51	рН	2
	TIME	및 NO.	TYPE	DEPTH (m)	Ι,	C	, , ,	.	SIGMA-T	AN	OMALY-X	107	₹ △ 0 DYN. A x 10 ³	^. V	LOCITY	021117	, ha.		µg - a1/1	μg - αI/I	μg - σ1/1	µg - at/1	J Pri	c
	HR 1/10	+					+-							1		1	1							77
		l I	STD	0000	١ 2	278	3646	. '	2513	1 00	2847	3	0000	1	5311	i	1	1		'	1	I	,	
	003	3	OBS	0000		278	3646		2513	•		_			5311									
	• • •		STD	0010		279	3649		2514	0.0	2834	0	002		5313									
	00	3	OBS	0012		279	3649		2515						5314									
		-	STD	0020	2	278	3652	2	2517	0.0	02814	9	005	7 1	5315									
			STD	0030	2	277	3655	i	2519	0.0	02794	8	008	5 1	5317									
	00	3	OBS	0034	2	277	3655	3	2520					1	5317									
			ST0	0050	2	277	3657	7	2521	0.0	32787	1	014	1	5320									
	00	3	085	0056		277	3657		2521						5321									
			510	0075		188	3664		2552	0.0	02505	1	020		5303									
	0.0	3	OBS	0084		139	3665		2566						5291									
			STD	0100		027	3664		2596	0.0	02093	33	026		5264									
	00	3	OBS	0111		966	366		2611		^ 1 0 0 7		0.41		5249									
			STO	0125		931	3661		2619		01882 01780		031		5242 5231									
	0.01	2	STD	0150		.880 .855	36 5 9		2630 2636	U	01780	13	0360		5227									
	00:	3	OBS STD	T0166 0200		830	3655		2640	0	01705	. 7	044		5225									
	00	2	OBS	0219		819	3654		2642	0	01102	, ,	0 +4		5225									
	00.	2	STD	0219		811	3654		2644	0	01684	. 7	053		5227									
			STD	0300		794	3652		2647		01675		061		5231									
	0.0	3	OBS	0325		784	3650		2648	•	010.3		•		5232									
			STD	0400		750	3645		2652	0	01655	7	078		5233									
	0.0	3	OBS	T0432	1	730	364	19	2655					1	5232									
			STD	0500	1	691	3632	2	2657	0	01644	+2	094	7 1	5231									
			SID	0600	1	586	3613	3	2667	0	01572	8	110	8 1	5213									
	0.0	3	OBS	0644	1	522	3602	2.2	2673					1	5199									
			STD	0700]	1397	3580)	2683	0	01429	90	125	9 1	5166									
			SID	0800	1	180	3546	ò	2700	0	01263	8 8	139	3 1	5105									
	00	3	OBS	T0856		1062	353		2711						5071									
			STD	0900	(958	3525		2724		01030		150		5040									
			STD			754	351		2745	0	00812	2 18	160	-	4978									
	00	3	OBS_	1063		649	3504		2755						4946									
			SID			0632	3504		2757		00690		107		4946									
			STO		-)584	350		2762		00642		174		4943									
			STO)537	350		2767		00595		180	-	4941									
			STD			1490	350		2772		00547		186		4938									
	0.0	2	STD			1443	3500		2776 2 7 77	Ü	00500	1 1	191		.4935 .4935									
	00)	088	T1525	()431	3500	J ()	2111					•	-700									

SHIP	LATITI			SITUDE S	3 3	ARSDEN	(0	ON TIME	YEA		OR RUISE NO.		OR'S TION MBER	\neg	DEPTH TO IOTTOM	DEPTH OF	H 085	WAVE		WEA THER CODE	. [S		NODC STATION NUMBER
-		1/10	_	1710	+ '			AY HR.1/					WRFK	-+-		S'MPL		HGT PER	SEA	+	TIPE AA		-	
RC	3158	3 N	067	39 W	1 1		11/2			56 A		003	- T	4	846	47	10	3 4		X1	8 2		1	0003
						COLOR	TRANS	WINI	PEED	ARD-	DS	RTEMP		VIS.	NO. OBS.		ECIAL							
						CODE	(m)	DIR. FO		(mbs)	BUI		BULB	ODE	DEPTHS	OR25K	VATIONS							
										182	21	1	174	7										
MESSENG	CAST	610			Т		Γ-	'Т		Τ.,	reitie i	VOLUME	1 2 /	_ D	1 (0)	IND		1 00			100	110	1,00	
IIImi	F NO.	CAR		DEPTH Imi		1 °C	\$ '	٠/٠٠	SIGM A -		NOMAL		DYN	. M.		CITY	D2 m1/1	PO 4-		OTAL—P ug + al/l	NO2-N	ND3-N ug + of/		
HR 1/10	0	-	-+		+					-			+ ^		-	-		-	-			+	-	+
ļ		ST	ا م	0000	-	2276	1 364	3	2510		0028	671	00	าก	15	310		}	ı		l	ł	1	I
0.5	5	085		0000		2276	364		2510			0,1	00			310								
		ST		0010		2277	364		2510	(0028	737	00	29		312								
0.5	5	085	,	0010		2277	364	30	2510	C														
		ST	0	0020		2274	364	.3	2511	(0028	702	0.0	57	15	313								
		ST		0030		2273	364		2511	0	0028	714	0.0	86	15	314								
0.5	5	085		0030		2273	364		2511							314								
		ST		0050		2274	364		2511	(0028	798	01	44		318								
0.5	5	OBS		0051		2274	364		2511							318								
	_	ST		0075		2098	366		2579	C	0022	455	02	0.8		279								
0.5	5	085		0077		2087	366		2583			0.0.				277								
0.5		ST		0100		2005	366	-	2605	(0020	084	0 2	61		259								
0.5	5	OBS		0103 0125		1995 1925	366		2607	,	2010	F 2 1	0.3	0.0		256								
		ST S T		0125		1867	366 365		2622 2634		0018 0017		03			240 228								
0.5	5	085		TO153		1862	365		2634	(1011	400	0,5	54		227								
0,5	_	ST		0200		1825	365		2642	(0016	864	04	40		224								
0.5	5	OBS		0204		1823	365		2642			007		70		224								
	-	ST	D	0250		1828	365		2643	(0016	988	05	25		233								
		ST	D	0300		1833	366	0 .	2643	(0017	136	06	10	15	243								
0.5	5	OBS	,	0301		1833	365	97	2643						15	243								
0.5	5	QBS	,	T0399		1748	364	48	2653						15	233								
		ST		0400		1748	364	5	2653	(0016	531	07	78	15	233								
		ST		0500		1690	362		2654		0016		04			230								
	_	ST		0600		1581	361		2668	(0015	601	11	05		211								
0.5	5	085		0605		1574	361		2669							210								
		ST		0700 0800		1409 1206	358		2681		0014		12			170								
0.5	5	ST OBS		10816		1171	355 354		2699 2703	(0012	119	10	46		115 105								
0)	-	ST		0900		0965	352		2723		0010	420	15	1.8		042								
0.5	5	085		0923		0917	352		2728		.010	7	1.7	0		028								
	-	ST		1000		0783	351		2741	(0008	515	16	0.3		989								
0.5	5	OBS		T1030		0737	350		2746		, . •					976								
		ST		1100		0684	350		2753	(0007	348	16	82		967								
		ST		1200		0615	350		2762	(0006	530	17	51	14	956								
		ST		1300		0556	350		2768		0005		18	14	14	949								
		ST		1400		0505	350		2774	(0005	341	10	70		945								
06	4	085		1440		0488	350		2775							945								
		ST		1500		0474	350		2776		0005		19			949								
0.6	/-	ST OBS		1750 T1930		0423	350 350		2780	C	0004	045	20	4 /		969								
0.0	4	ST		2000		0393	349		2782	_	0004	757	2.1	. 7		987								
06	4	085		2428		0340	349	7	2782	C	0004	102	21	0/	14	996								
0.0	•	51		2500		0333	349	6	2784	-	0004	610	24	ń. 1	15	059								
06	4	085		T 2926		0294	349		2786		,,,,,,	010	2 4	U 1		115								
		ST		3000		0287	349	-	2787	(0004	194	26	26		125								
06	4	085		3430		0254	349		2789							186								
0.6		085		3934		0233	349		2789							265								
-		ST		4000		0231	349		2789	(0004	254	30	59		275								
06	4	085		T4695		0224	349		2792					- 1		396								

4CE	SHIP	LATITU	IDS.	101	ACILIDE TOUR	MAR	SOEN	STAT	ION TIA		YEAR	Church	ORIGIN				PTH TO	MAX, DEPTH		WAVI SERVAT	E TONS	WEA-	CLOUD			NOOC TATION
IO. NO.	COOE		1/10	10,	1/10	10*	1.		DAY HR			CRUIS NO.		MUN		801	TOM	S'MPL"	1		ER SEA	0000		1		UMBER
	0.0	3 30 0		0.0		115					04		+			1.0	7.6	1	1	1		1		1		
061	RC	3200	N	00	846 W	1115	1-1				966	5 A6			hr	49		15	26	2 2	-	X 1	8 2		1	0004
							WA			NO	BAI		AIR TE	_	VIS	. 1	85.		CIAL	1						
							COLOR	TRANS.	OIR.	OR	M E		ORY '	8U		OEF	PTHS	OBSERV	ATIONS							
								 	26	508	1	79	211	1 6	69 7	1	4									
		_			T .		J	-	-	-	1-			-		4				_						
	MESSEHGR	CAST NO.	CA		OEPTH (m)	1	r °c	s	٠/	SIGM	A-T		MALY-I		2 ∆ [0YN. /	ŭ.		JNO	O 2 ml/		4-P	TOTAL-P	NO2-N	NO3-N	\$104-51	рН
	HR 1/10	T NO.	TY	PE								ANO	WV[1-1)	ψ.	x 10 ³		VELC	DCITY		h8.	1/10	ا/10 - وبر	μg - ot/1	µg = a1/1	νg - αt/	
					I -							I														
	I	•	's	ΤD	0000	' 2	323	36	43	249	7	00.	2992	3 '	0000	ο'	15:	322 '		1						
	117	7	OB	S	0000	2	323	36	434	249	7						15	322								
			S	TΟ	0010	2	322	36	44	249	8	00.	2987	7	003	С	15:	323								
	117	7	OB	S	0010	2	322	36	442	249	8						15:	323								
				TO	0020		322	36		249			2991		0061			325								
				TΟ	0030		321	36		249		00.	2994	6	009	С		326								
	117	,	08		0031		321		440	249								326								
				ΤO	0050		322	36		249		00	3004	8	015			330								
	117	,	08		0053		322		438	249								330								
				TO	0075		320	36		249		00	3007	8	022	5		334								
	117	,	08		0078		320		444	249				_				334								
			-	TD	0100		122	36		257		00.	303	5	029	1		290								
	117	'	08		0105		086		722	258				_		_		282								
				10	0125		2002	36		260			2017		034			262								
	117	,	08	TD	0150 T0157		920	36	601	262		00	1864	4	039	4		243								
	111			5 T0	0200		1841	36		262		0.0	1725	^	048	,		239								
	117	,	0B		0200		834		553	263		00	1725	U	048	4		228 227								
	111	1		1D	0250		821	36		264		0.0	1702	0	056	0		230								
				10	0300		802	36		264			1678		065			233								
	117	7	OB		0308		799		542	264		00	1010	_	00)	•		234								
	11,			TO	0400		758	36		265		0.0	1667	4	082	1		236								
	117	7	QВ		T0408		753		450	265		00	1001	_	002	_		236								
	11,			TD	0500		706	36		265		0.0	1664	Ω	098	Ω		235								
				TD	0600		596	36		266			1580		115			216								
	117	,	08		0612		.578		120	266		00	1 7 0 0	7	110	0		212								
				TD	0700		385	35		268		0.0	1403	Я	129	Q		162								
				TO.	0800		175	35		270			1225		143			104								
	117	7	OB		10816		142		454	270		•		-		-		094								
				TD	0900		958	35		272		0.0	1008	9	154	2		040								
				TD	1000		774	35		274			0837		163			986								
	117	7	08		1022		739		089	274								975								
				TD	1100		693	35		275		00	758	4	171	4		970								
				TD	1200		634	35		275			695		178			964								
				TD	1300		576	35		276			0633		185			957								
			S	TD	1400	C	517	35	03	277			0572		191			949								
			S	TO	1500	C	458	35		277			0512		196			942								
	117	7	08	S	T1531	C	440	35	010	277								939								

						_												MAX.			_	1			
REFERENCE CTAY IO.	SHIP	LATITU	OE	LONG	GITUDE	DRIFT	SQU	SDEN JARE	STAT	ION TI	ME	YEAR	CRUISE	GINAT	OR'S	-	DEPTH TO	DEPTH	OB:	WAVE SERVATIONS	WEA	CLOUD	:	57.	OOC
CODE NO.	CODE	•	1/10		1/10	PZ	10"	11.	мо	DAY H	R.1/10		NO.	NU	M8ER		MOTTOR	OF S'MPL'S	DIR	HGT PER SE	cool	TYPE A M	т	NL	JMBER
31106	1 RC	3158	N	070	00 W	П	116	10	11	20 1	68 1	966	A62	005			5121	47	34	6 3	x 2	6 8			0005
			,					WA	TER	W	IND	BARO	AIR	TEMP	. °C	VIS.	NO.	SPEC			,				
								COLOR	TRANS.	OIR.	SPEED OR FORCE	M ET ER	QR1		W ET	CODE	OBS. DEPTHS	OBSERV	ATIONS						
								CODE	-	0.2	S20	187	_	_	172	7	21								
				_					-	0.2	720	10,	20			L.,	Ц——			_		1			
	MESSENGR TIME	CAST NO.	CAR	0	OEPTH (ml	T	°C	s	٠/	SIGM	A -T	SPECIFIC V	OLUMI	ογ	△ 0 N. M 10 ³	VELC		O2 m1/1	PO4-P	107AL=P pg = 61/1	NO ₂ -N		\$104-5	рН
	HR 1/10	1							↓						X	103	7666			pg - 0//1	Dg - 61/1	μg - a1/l	νg - αt/l	µg - 01/1	
									1						1							ļ.			
	1.00		51		0000			366	36		249		0030	388	00	000	15								
	168 168		085 085		0000			366 367		536 539	249						15: 15:								
	100		ST		0010			367	36		249		0030	+28	0.0	130	15								
			ST		0020			367	36		249		0030			61	15								
			ST	D	0030)		366	36	54	249	3	0030	473	00	191	153	338							
	168		085		0030			366		541	249						15:								
	140		ST		0050			367	36		249		0030	589	0.1	52	15								
	168		085 51		005			367 363	36	535	249		0030	c 2 n	0	2.20	15: 15:								
	168		085		007			363		534	249		0030	020	02	229	15:								
	100		51		0100			140	36		256		0023	582	0.4	97	15								
	168		085		010			117		694	257						15								
			ST	D	0125	5	2	015	36	66	260		0020	575	0.3	352	15								
			ST	Ö	0150		1	929	36	63	262	1	0018	721	04	01	152	240							
	168		085		T0154			918		625	262						15,								
	1.00		51		0200			856	36		263		0017	541	04	+92	15								
	168		OBS ST		0206			849 821	36	559	263 264		0017	150	0.5	78	15. 15.								
			ST		0300			786	36		264		0016			663	15								
	168	,	085		0309			780		486	264		0010	. 0 3			15								
	168		085		10399		1	712	36	378	265						15.								
			ST		0400			711	36		265	6	0016	176		128	15.	221							
			ST		0500			603	36		266		0015			87	15.								
	1.40		ST		0600			462	35		267		0014	548	1 1	138	15								
	168	1	085 ST		0619			432 268	35	872	268 269		0013	070	, .	276	15								
			ST		0800			073	35		271		0012			396	15: 15:								
	168		085		T0826			023		323	271		0011	200	• -	,,,	150								
			ST		0900			883	35		273		0009	534	15	00	15								
	168		085		0928			833		138	273						149								
			ST		1000			707	35		274		0007	692	15	86	140								
	168		OBS		T1029			663 620	35	053	275		000/	71.0	٠.		149								
			5T 5T		1200			565	35		275 276		0006			723	149								
			ST		1300			518	35		276		0005			782	140								
			ST		1400			477	35		277		0005			337	149								
	177		085		T1476			451		008	277		0000				149								
			ST	D	1500			448	35		277		0005	036	16	89	14								
			ST	D	1750	Ú	0	415	35	01	278	0	0004	821	20	12	140	966							
			51		2000			386	35		278		0004	636	21	130	140								
	177		085		T2020			384		00B	278				_		140								
	177		ST		2500			337	34		278		0004	597	23	361	15(060							
	1//		085 ST		2532 3000			334 295	34	00Q 94	278 278		0004	515	2-	89	15	1 28							
	177		DBS		13066			290		934	278		3004		۷.		15								
	177		OBS		360			250		920	278						15.								
			ST	0	4000			237	34		278		0004	403	30	35	15								
	177		085		4140			234		898	278						15								
	177		OBS	1	T468	Ţ	0	230	34	906	278	19					15	396							

CE D.	SHIP	LATITUS	DE	LON	IGITUDE	INDCT		SDEN JARE		MT)		YEAR	CRUISE		ATIO	ON	DEPTH TO	MAX. DEPTH OF	"	WAVE SERVATIO		WEA- THER	CLOUD		S:	NODC TATION UMBER
10.		•	1/10		1/10	- =	10*	1.	MO D	AY HR	.1/10		NO.	N	UMI	BER	BOTTOM	S'MPL"	S DIR.	HGT PER	SEA	CODE	TYPE AM	1	, N	OWBER
61	RC	3215	N	070	030 W	İ	116	20	11 2	0 2	14 1	966	A62	006	5		5303	16	01	6 4		X1	18/2			0006
	1		,		'	'		WA	TER	w	IN D	BARG		AIR TEM	P. 1		NO.	·		,		,			•	
								COLOR	TRANS.	DIR.	SPEED	METE	R (DRY	wı		200	DBSERV	CIAL ATIONS							
								CODE	lm l	<i>-</i>	FORCE	(mbs) B	nrs	BU	18	DEFINS									
									1 1	03	516	195	5 2	00	1 :	50 7	13									
Γ.	wessenge	CAST	CAI				1	1	1		I	1	105/2151/	VOLU.		≨ ∆ D	(0)	UND		PD4-		OTAL-P	NO2-N	ND3-N	SI 04-5	
	TIME C	T NO.	TYE		DEPTH (m)	'	T *C	δ.	·/	SIGM	A-1	ANOM	ALY-IN	3	DYN, M x 10 ³		DCITY	0 2 ml/	μg - al	21	ug - 61/1	μg = at/1	μg - αl/l	yg - a1/l	pН
-	HR 1/10	1					+		+ -		-	-			\rightarrow					+	-+-				+	1
		1 1	-		0000	,	Ι.	246	1 2 (6	7]		000	01/0	.	0000	1,,	334			- 1					i
	21/			10	0000			2366 2366	365 365		249		003	0165	>	0000		334 334								
	214	•	0B.	5 TD	0010			2365	365		249		003	0158		0030		335								
	214		OB		0011			2365	365		249		003	0156	-	0030		335								
	214	*		a TD	0020			2366	365		249		003	0221	1	0060		337								
				TD	0030			2367	365		249			0289		0091		339								
	214		ОВ		0031			2367	365		249		002	.020		0071		339								
		•		T D	0050			2366	365		249		003	0383	3	0151		342								
	214		OB.		0052			2366	365		249					•		342								
				TD	0079			365	365		249		003	0422	2	0227	15	346								
	214	•	ОВ		0079			2365	365		249							347								
				ΤD	0100)		2072	366	6	258	5	002	1940	5	0293	15	277								
	214		ΟВ	S	0109	5		2020	366	72	260	0					15	264								
			S	TD	0129	5		1956	366	2	261	3	001	9375	5	0344	15	249								
				TD	0150)		1895	365	8	262	6	001	8243	3	0391	15	235								
	214	•	οв	S	T0158	3		1880	365	70	262	9					15	232								
			S	TO	0200)		1841	365	5	263	В	001	7293	3	0480	15	228								
	214	+	οв	S	0211	1		1832	365	50	264	0					15	227								
			S	TD	0250)		1818	365	4	264	4	001	7015	5	0566	15	230								
			S	TD	0300)	1	1794	365	1	264	6	001	6829	7	0651	15	230								
	214	+	08.	S	0317	7		1784	364	96	264	7					15	230								
				TD	0400			1732	363		265		001	6710)	0818		227								
				TD	0500			1640	361		265			6205		0983		214								
				ΤD	0600			1515	359		267		001	516	2	1140		189								
	214	•	0 B		0636			1462	359		267							177								
				TD	0700			1342	357	_	268			3725		1284		147								
				TD	0800			1155	354		270		001	2085	5	1413		096								
	214	•	08		T085			1059	353		271				_			070								
				T D	0900			951	352		272			0039		1524		037								
	23.			T D	1000			0761	351		274		000	816	Ö	1615		981								
	214	+	08		1058			0669	350		275				_			953								
				TD.	1100			0650	350	-	275			7120	-	1691		953								
				TD	1200			0606 0562	350 350		276			6641		1760		952								
				10							276			6176		1824		951								
				TD TD	1400			0517 0473	350 350		277			15704		1884		950 948								
	214		0B		T157			0441	350		277		000	15234	+	1738		948								
	414	+	UD	3	1157	۷	,	7441	330	24	211	0					14	741								

RENCE	SHIP	LATITUOE	10	NGITUDE 2	AM SO	RSOEN UARE	STAT	ION TH	ME	YEAR	0.01	ORIGIN	_		DEPTI	DEFI	H OF	WAVE	ONS	WEA-	CLOUG			NOOC
10. NO.	COUE	1/10		NGITUDE	Z 10*		MO C		1,1/10	12738	CRUI!			ION ABER	80110	M S'MPI	l l	HGT PE		COOE				UMBER
106	RC	3229 N		7055 W	110					196	6 A6	2 00	7		5139		_	6 4		x1	8 2	1		0007
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1	, LE, 14	1 -		1	WA			INO	_		AIR TE		2	NO.	7'		101,	1	X T	1 0 12	1	1	0007
						COLOR	TRANS.	_	SPEED		RO-	ORY	_	VIS.	085.	00000	ECIAL VATIONS							
						CODE	(m)	UIK.	FORCE	(m	rbs)	8UL8		ULB	DEPIH	5 0032								
								03	521	2	10	195	1	50 7	14									
	MESSENGR			T		-	1				I March			₹ △ 0	1	OUND		1	٨.					
	TIME C		YPE	OEPTH (m)		т °С	S	٠/٠٠	SIGN	1 – A A	ANO	WALY-I	107	0YN. A x 10 ³	4.	LOCITY	0 2 ml/	PO4		OTA L-P +g + at/l		NO3-N ug - 01/l	\$1 O4-\$1 pg = o1/1	pН
	HR_1/10				+		⊹ —		-		+		_	X 10-	-		-	-	-		-		-	
		Ι Ι .	- - 0	0000		1240	1		١	0.0		-071		200	Ι,									
	007		STD	0000		2369	369		24		00	3074	0	0000		5334								
	006		BS STD	0000		2369 2369	364		24		0.0	3077	, ,	0031		5334								
	006		BS	0010		2369		500	24		00	5011	2	0031		5335								
	000		STD	0020		2369	369		24		0.0	5079	1	0062		5337								
	006		BS	0029		2368	369	-	241		00	2017		0002		5338								
			STD	0030		2368	369		24.		0.0	3082	4	0092		5338								
	006		BS	0048		2368	364		24					0072		5341								
			STD	0050		2368	364		24		00	3097	7	0154		5342								
	006	0	BS	0072		2368	364	95	24	89						5345								
			STD	0075		2338	369	54	25	01	00	2987	ь	0430	1	5339								
	006	_	85	0095		2163	36		25							5301								
			STD	0100		2134	36		25			2291		0496		5294								
			STD	0125		2012	366		26		00	2035	5	0350		5265								
	006		BS	T0143		1945	366		26							5249								
	0.0		STD	0150		1930	366		26.		00	1874	6	0399		5246								
	006		BS	0191		1857	369		26					0		5231								
			STD	0200		1851	365		26.			1749		0490		5231								
	006		STD BS	0250 0287		1821 1802	365		26		00	1708	1	0576		5230								
	000		STD	0300		1799	369		26		00	1692	7	0661		5231								
	006		SIV BS	10383		1768	364		26		00	1035	1	0661		5232 5236								
	000	-	5 T D	0400		1762	364		26		00	1669	7	0829		5237								
			STD	0500		1697	363		26			1643		0995		5233								
	006		BS	0578		1611	361		266				,	0, 4,		5218								
			STD	0600		1577	361		26		0.0	1559	8	1155		5210								
			STD	0700		1405	358		26			1424		1304		5169								
	006		85	10775		1260	356		26		- 0		_			5130								
			STD	0800		1193	355	64	270		0.0	1230	9	1437		110								
			STD	0900		3954	352	26	27.	25	0.0	1016	4	1550		5038								
	006	01	ьѕ	0972		9080	351	102	27	36					14	4994								
			STD	1000		0788	35	lo	27.	39	0.0	0876	7	1044	1	4991								
			STD	1100	1	0715	350	18	27	48	00	0790	7	1728	1	4979								
			STD	1200		0641	350		27		00	u706	8	1802	1	4960								
			STD	1300		0567	350		276			0624		1069		4453								
			STD	1400		0493	350		27		0.0	0545	3	1927		4940								
	006	01	35	T1468	(0443	350	109	27	77					1	4930								

ID.	-	SHIP ODE	LATITUD)E	LON	NGITUDE 1710	DRIFT	MARS SOUA	ARE	{	ON TI	Y	EAR	CRUI		TATION UMBE		DEPTH TO 801108	DEFIE	† DBS	WAVE ERVATIONS	T!	VEA- HER ODE	CLOUD CODES		2.	NODC IATION UMBER
06	-	RC	3250	N	0.7	130 W	Н	116	_				966	A 6	-		-	5120	3 7411 2	-		<u>`^</u>	K1	8 2	-	_	
. 00	-1	,,,	3230	''	,	130 #		110	WAT				,00		AIR TEN				49	01	6 4	1 /	Λ.I.	8 2	I	1	0008
								-				SPEED CAN	BARD		DRY	WET	VIS.	NO.	SPE	CIAL							
									COLOR	TRANS.	DIR.	OR FORCE	(mbs)	`	BULB	BOTE	CODS	DEPTHS	OBSERY	VATIONS							
								t			03	514	225	5	181	126	7	21	† -								
								_		_								T	1			_					
	M	ESSENGE TIME 0	CAST	CAP		DEPTH	(m)	1	'C	\$	٠/	SIGMA	1−1	SPECI	MALY-X10	AE E	E A D		UND	02 ml/l	PO ₄ -P	ATOTA		NO2-N	NO3-N	\$1 D4=\$i	pН
	н	R 1/10	1					1									x 103	VEL	DCITY		µg = 01/1	h6 -	01/1	μg - o1/l	µg - at/l	νg - 0 1/l	
				Si		000			310	363		249		00	29974	+ (000		318								
		040		089		000			310	363		249							318								
				SI		001			309	36:		249		00	30037	7 (0030		319								
		040		089		001			309	363		249				_			319								
		0.0		SI		002			310	36:		249		00	30057	7 (060		321								
		040		0 B S		002			310	363		249							323								
		040		\$1		003			310	363		249		0.0	30081		1090		323								
		040		OBS		004			311 312	363 363		249	_	0.0	2071	, .	150		326								
		040		089		007			312	361		249		UU	30212	٠ (150		327								
		0 70		S1		007			331	364		249		0.0	30545		1226		331								
		040		0B3		007			336	365		249		UU	20245	, (1426		341								
		0 -0		SI		010			265	36:		252.		an	27955	, ,	299		325								
				51		012			061	366		258			22045		1362		277								
		040		089		T014			77	366		260		00	22042		702		257								
				Si		015			957	366		261		0.0	19419	9 (414		253								
		040		089		018			398	365		262		•	* / • 1	•			242								
				51		020			380	365		263		00	17981	ı c	1507		240								
				51		025			336	365		263			17304		596		235								
		040		085		027			322	365		264							234								
				S1	G	030	Û	18	315	365	5	264	4	00	17044	• 0	681		237								
		040		089	5	T036	1	1.7	747	365	32	264	7						242								
				SI	D	040	Ü	17	780	365	3	265	1	00	16694	• C	850	15	243								
				S1	D	050	Ü	17	737	364	6	265	6	00	16509	9 1	016	15	246								
		040		085		054			717	363		265	5					15	247								
				S1		0600			49	362		266			16368		190	15	234								
				51		0700			+78	359		2676		00	15011	1	337	15	193								
		040		OBS		1073			.03	358		268							174								
		0		ST		080			46	356	-	269		00	12915) 1	477		129								
		040		OBS		083			64	354		270		0.5					105								
		040		S1 085		0900 T093			92 920	352		2720		00	10760	, 1	595		052								
		040								351		2725							030								
				S1		1000			341 737	351 351		2739			09239		695		011								
				SI		1200			45	350		274			07950	_	781		988								
				51		1300			67	350		276			06978 06179		956 922		968 953								
				ST		140			02	350		277			05591		981		943								
				51		1500			49	350		2775			05108		034		938								
		049		OBS		T152			37	349		2776		-0	J / 1 U C	, 2	بەر ت		937								
				51		1750			11	349		277		0.0	04897	7 2	159		964								
				51		2000			85	349		278			04760		280		996								
		049		OBS		T201			883					. •					, . •								
				SI		250	0		340	349	9	2786	5	00	04526	2	512	15	062								
		049		OBS	5	251	0	03	339																		
				ST		3000	0	0.2	98	349	8	2790	C	00	04252	2 2	731	15	130								
		049		OBS	i	T 3004	4	0.2	98	349	84	2790					_		131								
		049		089	,	349	5	0.2	59	349	32	2789	9						199								
		049		OBS	6	3988		0.2	41	349	15	278							278								
				ST	0	4000	С	0.2	41	349	2	2790	C	00	04329	3	160		280								
		049		OBS	:	T4925	5	0.7	233	349	94	2796	6						442								

TABLE V .- Continued

REFERENCE CTRY ID.	SHIP	LATITU	DE	LON	GITUDE SOUTIDE	MARS		STAT	ION T	IME	YEAR	CRI	ORIGIN.	ATOR"		DEPTH	DEPT	H OR	W A	VE A TIONS	TH	EA-	CLOUB			NODC	
CODE NO.	CODE	•	1/10		1/10 2 €	10*	1.	MO I	DAY H	R.1/10				UMBE		BOTTOA	S'MP	'S DIR	HGT	PER S	EA CC	300	TYPE AMI			NUMBER	
31106	RC	3310	N	07.	200 W	116	32	11	21 0	880	1966	Α.	62 004	9		5028	1 15	01	5	4	×	0	0			0009	9
						[WA	TER	V	VIND	BARC	i- I	A IR TEA	AP. °C		NO.		ECIAL	ì				_		,		
						ĺ	COLOR	TRANS.	OIR.	SPEED	METE	R	DRY BULB	WET		OBS.		VATIONS									
						ŀ	COOL	11.11	36	S14		-	172	111	_	14											
				_				-	50	314	1	7	112	-		<u> </u>	<u> </u>	T	_		ī						_
	MESSENG	CAST ONO.	CA TY		DEPTH (m)	T	*c	S	٠/	SIG	MA-T		CIFIC VOLUE	M E	Z ∆ D DYN. M	. 50	OCITY	02 ml/		O4-P	TOTAL		NO ₂ -N	NO3-N	SI O4-		
	HR 1/10)												_	x 10 ³	AEL	OCIII			9 - 01/1	µ0 = 0	171	ug - a1/1	yg = al/l	hå - a	71	
				_															-								
	2.0	0		LD .	0000		321	36		24		0	03076.	2 1	0000		320										
	0.8	8	ОВ	_	0000		321		310	24	_	0	02005	,	22.1		320										
	08	8	0B	TD c	0010 0010		32 <i>2</i> 322	36	307 307	24 24		U	03085	1) U 3 1		322										
	0.01			TD	0020		322	36		24		0.0	030869	9 1	0062		323										
				TD	0030		322	36		24			03090		0093		325										
	08	8	QB		0030		322	36		24				-			325										
				TD	0050		320	36:	31	24		0	03093	5 (154		328										
	08	8	ОВ	S	0051	2	320	36	309	24	89					15	328										
			S	ΤD	0075	2:	310	36	31	24	92	0	030754	4	0231	15	329										
	0.8	8	ОΒ		0077		309	36	317	24						15	330										
				TD	0100		3 U U	364		25	-	0	02978:	3 1	3307		332										
	0.8	8	OB		0101		298		425	25					_		332										
				TD	0125		118	36		25			02396:		374		292										
	08	0		TD	0150 0153		982	366		26		0	020048	8 (1429		260										
	00	8	ОВ	5 TD	0200		969 374	365	535	26 26		0	01790	,	3631		257										
	0.8	۵	0B		0204		368		579	26		U	01790	1 1	0524		238										
	0.01	0		TD.	0250		338	365		26		0.	017352	2 1	0612		237										
				TD	0300		315	365		26			017044		0698		237										
	08	а	OB.		0305		313	365		26		0	01104	•	,0,0		237										
	001			ΤD	0400		796	365		26		0.0	017075	5 .	0869		248										
	0.8	8	ОВ		T0407		794	365		26			01.01.	,	, , ,		248										
				TD	0500		778	364		26		01	01734	3	1041		258										
			S	TD	0600	1	707	36:	35	26	55	0 (016925		1212		252										
	0.8	8	0В.	S	0612	16	95	36	331	26	56					15	250										
			_	T D	0700		74	360		26			01605		1377	15	225										
		_		TD	0800		399	358		26		0 (014538	В	1530		183										
	0.81	В	0B.		T0817		365	35		26							174										
				TD	0900		141	354		27			012128		1664		108										
	088	R	0B:	T D	1000 1019		912 374	35		27		0 (010218	5 .	1775		038										
	001	U		5 TD	1100		305	35		27 27		0	00007		1 2 7 7		027										
			_	TD	1200		719	350		27			009074 00806		1872		014										
			_	TO	1300	_	34	350		27			00708		1957 2033		997 980										
				τō	1400		48	350		27			006148		2099		962										
				TD	1500		+63	350		27			005245		2156		944										
	081	8	οВ.		T1502		+61	350		27		-	00724.		0		943										

REFERENCE	T					4	MAR	SDEN	5141	ON TI	AA F			ORIGIN	A TOR'S		DEPTH	MAX		v	AVE	WEA	. CLOU	ь		NODC	٦
CTRY ID.	CODE	LATITU		LONG	ITUDE	DRIFT	sou	ARE	- (3M1)		YEAR	CRUISE	s	TATIO	4	TO	OF	1 '	DBSE	PATIONS	THE	COD	\$;	STATION	
CODE NO.			1/10		1/10	-	10*		WO E				NO.		IUWBE	*		3 MrL	*S DII	$\overline{}$	GT PER SE	A 000	LTPE A		— + ·		4
31106	1 RC	3331	N	072	34 W		116					1966	A62				4901	16		1 1	5 4 1	X 1	819	;		0010	٦l
								WA	_	- 4	SPEED	BAR	0-	AIR TEA	_	VIS.	NO. OBS.	SPI	ECIAL								
								COLOR	TRANS.	DIR.	OR FORCE	MET		DRY ULB	W ET BULB	COD	DEPTH		VA TION	12							
									 	02	520	24	5 1	72	125	7	14	1		\dashv							
		_					т —		1	-	T	1-					!	1					1		т	T	-
	MESSENGR TIME		CAF		DEPTH ((m)	T	°C	\$	٠/	SIGA	A-T	SPECIFI	ALY-II	ME I	≨ ∆ D DYN. M x 10 ³	. SC	OCITY	02 m	1/	PO4-P ug - o1/1	101A L = 1					
	HR 1/10	1		`			_		-		ļ					x 10 ³		.00		_	pg - 01/1	pg = 6171	1 24 - 00	ug - 01/	1 29 - 01/	1	_
						_	_		1	_	1		١		-								1			1	
				T D	0000			309	363		24		003	025	7 (0000		317									
	118		OB:		0000			309	363		24							317									
	118	\$	OB:	5 T D	000			309 309	363 363		249		003	031	0 (0030		319									
			5		002			309	363		24			035		0061		320									
	118	1	08:		002			309	363		24		002	0 2 2	' '	,,,,,		322									
		,		TD	003			309	363		24		003	039	ŭ (0091		322									
	118	3	OB:		004		2	309	363	38	24							325									
				T D	005	0	2	309	363		24		003	042	4 (152		326									
	118	3	OB:	S	007	0	2	310	363	345	24	94					15	329									
			S	TD	007	5	2	297	364	4	251	05	002	945	7 (227	1 5	328									
	118	3	OB:		009			236	366	93	25						15	318									
				TD	010			184	366		25			475		294		306									
				TD	012			027	366		25		002	102	6 (252		268									
	118	3	0B:		T014			954	366		26		001	0 (0	,			251									
	110		_	TD.	015			922 824	366		26.		001	869	2 (0401		243									
	118	•	OB:	5 TD	019			824	365		26		001		. ,	9490		222									
				TD	025			824	365		26			669) - 4 0		232									
	118	ı	08:		029			822	365		26		001	007	•	, , , 4		238									
				T D	030			822	365		26		001	699	6 (058		239									
	118	3	OB:		039			812	365		264			• , ,	•	,-,0		251									
				TD	040			810	365		26		001	712	8 (829		252									
			S	TD	0500	0	1	780	365	0	264	49	001	724	4	1001	15	259									
			S	ΤD	060	U	1	750	364	3	26	51	001	735	8	174	15	266									
	118	3	0B	5	060.	2	1	749	364	29	26	51					15	266									
				TD	070			593	361		266		001	633	8	342	15	231									
				T D	080			403	358		268		001	469	6	1497		184									
	118		OB:		T081			366	357		268							174									
				T D	0900			139	354		270			201		631		107									
	130		S		1000			904	352		27		000	986	3	740		036									
	118		OB:		103			825	351		273		0.00	077		L La		011									
				TD TD	110			783 715	351 350		274			877. 798		l 834 l 917		006									
				1D	130			647	350		279			722		1917 1993		996									
				TD	140			579	350		270			648		2062		975									
				TD	150			511	350		27			574		2123		964									

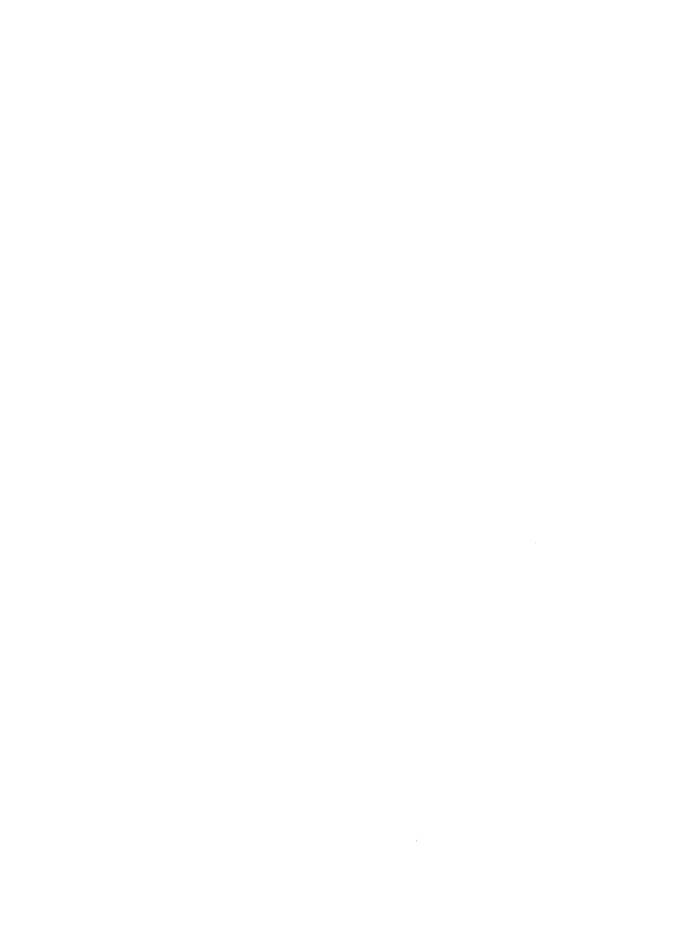
	, ,								_													_			1
REFERENCE	SHIP	LATITU	ns	LONGITUOE	MAR	SDEN	STATIO	N TIME	1	EAR	h	RIGINA			OEPTH TO	OEPT	H OB	WAVE SERVATIONS	W	EA-	CLOUD		- 1.	NDDC	
CODE NO.	COOE	•	1/10	1/10	10*		MO CA		_		CRUISE NO.		ATION UMBER		BOTTOM	S'MPL		HGT PER S	1 6	3OC	TYPE A MIT	ł	1	NUMBER	
311061	RC	3347		7300 W	116	-	11 21		1	966	A62	011			4572	43		5 3	_	(1	8 3			0011	1
, - 1 - 1						WA!		WING			*	ASR TEM		1	NO.	_			1 /	. 1	015	1	1	0011	1
						COLOR	TRANS.		EED OR	METE	R	DRY	WET	CODI	085.	OBSER	ECIAL VATIONS								
						CODE	(m)	FC	RCE	lmbs		nra	BULB		DEVIMS										
							C	4 5	. 7	25	3 1	71	133	7	20										
	MESSENGR	CAST	CARO		Ι.	*c	5 •/				SPECIFIC	VOLUA	, E	∆ D N. M	soi	UND		PO 4-P	TOTA	L=P	NO2-N	NO3-N	5104-5		s
	TIME (및 ND.	TYPE	DEPTH (m)	'	C	, ,	.	IGM A	-'	MONA	ALY-X10	7 0	10 ³	. AFFG	YTIOC	D 2 m1/	yg • a1/l	₩Q -	11/5	ug = 01/1	yg - at/1	ug = at/		č
				+	1			-												_			_	_	+
		' '	ST	0000	' z	296	3635	, ' ;	49	9 '	002	9783	00	000	15	314		1	1	- 1	1			1	1 .
	147	,	OBS	0000	2	296	3639	0 2	499	9					15	314									
			STO			296	3639		499		002	9822	00	30		316									
	147	•	OBS	0011		296	3634		499							316									
			STU			296	3635		499			9858		060		317									
	147	,	STI OBS	0030		295 295	3635 3634		499		002	9891	. 01	90		319 319									
	1-1		STI			295	3635		499		00.2	9952	a.	149		322									
	147	,	085	0055		295	3635		499		002	,,,,	. •	• • /		323									
			ST	0075		294	3638		50		002	9822	0.	224		326									
	147	,	OBS	0082	2	293	3638	4	502	2						327									
			ST	0100	2	096	3057		57	_	002	3220	0.	90	15	282									
	147	,	085	0109		021	3663		259						15	264									
			ST			979	3663		608			9866		344		255									
	1.7		ST			924	3663		624		001	8633	Ú.	92		244									
	147	'	08S ST[T0163 0200		900 854	3662 3658		2624 2636		001	7420				239									
	147	,	085	0218		836	3656		639		001	1420	, 0.	+82		232 230									
	141		STO			826	3656		64		100	7063	0:	69		232									
			ST			809	3659		64			6900		554		235									
	147	7	085	0328	1	800	3653	7	64	7					15	237									
			ST	0400	1	780	3650	1	64	9	001	6909	0.	323	15	243									
	147	,	OBS	T0442		759	3645		65							243									
			ST			723	3638		65.			6758		91		241									
			STO			625	3620		66		001	6107	1	155		220									
	147	,	085 ST	0660 0700		545 463	3606 3592		67		001	/. G n n	. 1	410		209									
			ST			264	3560		671			4830 3274		310 +51		188 135									
	147	7	085	10893		083	3537		71.		001	2614	, 1.	101		085									
			ST			070	3536		71		001	1519	1.5	574		082									
	147	7	OBS	0999		883	3519		73							028									
			ST		0	881	3519		73		000	9617	1 1	80	15	027									
			ST			691	3506		750		000	7675	1	767	14	969									
	147	,	OBS	T1112		671	3504		75							963									
			STO			617	3505		759			6801		339		956									
			ST0			562	3509	-	766			6129		904		951									
			STU			515 474	3505 3505		2772 2776			5577 5111		962 016		949									
	155	i	085	T1575		448	3504		779		000	> 1 1 1	. 20	119		951									
			STI			424	350:		78		000	4786	. 2	139		970									
			STO			393	3501		78			4721		.58		997									
	155)	085	T 2 1 2 2	0	379	3500	8 2	784	+						314									
			ST			345	3501		78		000	4462	2.	86	15	Ū 64									
	155		OBS	2674		330	3500		788							088									
	165		STE			303	3498		789		000	4352	2	708		132									
	155 155		08s	3221		286	3496		789							103									
	175	,	51[3766 400ū		245 235	3491 3490		78		000	/, 3.7·		1 2. 4		240									
	155	5	085	T4324		230	3489	-	789		000	4370	. د	L 4 4		277 332									
			000	1.524	0	200	J-0:	٠ ،	. 10						10	ے د د									

FERENC	SHIP	LATITU	DF 10	NGITUDE TON	MARSDEN	STATION	TIME T) YEA	R CRU	ORIGINA	TOR'S ATION		DEPTH TO	MAX. DEPTH OF	DB5	WAVE ERVATI	ons	WEA-	CLOUD		5	NDDC
Y ID	CODE	·	1/10	1/10		MO DAY		N CKU		UMBER	80	MOTTO	S'MPL'S	DIR.	HGT PE	R SEA	CDDE	TYPE AM	T	N	UMBE
110	1 RC	3406	N 0	7330 W .	116 43	11 21	199 196	56 At	012	?	4	224	15	05	5 3		x 1	1 8 6			001
	1	1	,	1 1	WA	TER	WIND .	ARO-	AIR TEM			ND.	SPEC								
					COLOR		SPEED N	AETER	DRY	WET C	VIS.	~ n r	DBSERVA								
					CODE	(m)	FORCE	(mbs)	BULB	BULB	-+										
						0	5 516 2	246	182	134	7	14									
	MESSENC	CAST	CARD			T		. SPEC	SIFIC VOLUA	AE DYN	7 b	sou	ND	~ 10	PO	Р	TOTAL-P	NO2-N	ND3-N	SI D4-Si	
	TIME	of NO.	TYPE	DEPTH (m)	1 ,0	5 -/.	SIGMA-	T AN	OMALY-110	P DYN	10 ³	VELO		Q 2 ml/l	18.		νg - φ1/l	μg - at/l	µg - 01/1	ug = at/l	P
	HR 1/1	0	-	+		+	-+			+					+						
			6.70	0000	2261)	3639	2512	1	028493	3 00	0.0	153	206		I			!	l	I	ı
	1.0		STO	0000	2260			01	120493	, 00	00	153									
	19	19	OBS	0010	2260 2255	3639 3638		0.0	028454	• 00	28	153									
	19	10	STD OBS	0010	2255	3638		U	020434	, 00	20	153									
	19	7	510	0010	2253	3639		0.0	028417	7 00	5.7	153									
	19	00	OBS	0020	2252	3638		Ų.	02041	, 00	, ,	153									
	19	7	510	0029	2252	3639		Ωı	028417	7 00	85	153									
	19	29	OBS	0048	2254	3638		,			5,	153									
			510	0050	2254	3639		0.0	02854	2 01	42	153									
	19	9	OBS	0073	2252	3639		,		-	-	153									
	• /		STO	0075	2232	3642		01	027623	3 02	13	153									
	19	9	OBS	0096	2056	3664						152	272								
			STO	0100	2044	3664	2591	01	021369	9 02	74	152	269								
			STO	0125	1966	3662	2610	0	019629	5 03	25	152	252								
	19	9	OBS	10148	1912	3660	1 2623					152	240								
			STD	0150	1909	3660	2624	0	01644	3 03	73	152	240								
	19	9 9	OBS	0193	1855	3657	9 2636					152									
			STD	0200	1855	3658			017423		-	152									
			510	0250	1850	3661		0	017296	5 05	50	152									
	19	99	OBS	0288	1839	3662							243								
			STO	0300	1833	3661		0	017049	5 06	35	152									
	19	99	085	10386	1786	3651						152									
			STD	0400	1778	3650			016844		05	152									
			STD	0500	1722	3639			01665	5 09	72	15									
	19	99	085	0582	1676	3630							239								
			STO	0600	1645	3624			01627		37		232								
			STO	0700	1462	3592			01480	6 12	92		188								
	19	9	085	10779	1305	3568							147								
			STD	0800	1250	3562			012850		31	15									
			STD	0900	1013	3533		0	01069	9 15	48	150									
	19	99	OBS	0987	0839	3513	_						800								
			SID	1000	0829	3513			00915		48		007								
			STO		0752	3510			00831		35		993								
			510	1200	0674	3507			00748		14		979								
			510	1300	0597	3504	2761	U	006696	D 19	85	T 44 ,	965								
				1/00	0610	2501	37/0	_	00503	, 10	7. 0	1 / /	040								
			STO STD	1400 1500	0519 0442	3501 3498		_	005924 00518		48		950 9 35								

FERENC	E	5.U.A	_			- =	MARS	DEN	STATE	ON TH		T	ORIGIN	ATOR'S		OEPTH	MA)		WAVE	WEA-	CLOUD			NODC
I ID		CODE	LATITU	1/10	LONGITUOE 1/1	NOCT	\$QU/		MOID	SMT)	YEAR			TATION		TO OTTOM	DEPT OF S'MPL	00	SERVATIONS	THER	CODES		2	TATION
110	-	DC.	3423		07400 W	_	116		_			+	-		_		J mire				1	-		
140	21	KC	3423	iN .	07400 W	1	110	WAT			28 1966	I A	62 01.		- 12	658	1 16	00	5 3	X1	8 7	1		001
							ŀ	COLOR	-		SPEED MART		DRY	WET	VIS.	NO. OBS.		ECIAL VATIONS						
								CODE	(m)	DIR.	FORCE [mb		BULB	BULB	CODE	DEPTHS	OBZEK	VAIIUNS						
										10	513 24	7	178	134	7	13			1					
	Γ.	AESSENGR			.		Т '				<u> </u>				EΔD									
		TIME	CAST NO.	CARC		(m)	T	,C	2 .	٠/	SIGMA-T	Al	NOMALY-X		YN, M,		OCITY	Q 2 m1/	PO4-P	TOTAL-P	NO2-N µg - 01/l	NO3-N µg - at/I	\$1 O4-\$1 pg - a1/1	рН
	,	HR 1/10							+			-		-	X 10-				+				-	-
	-				0 000		,	252	364	1	2516	1	0.2012	, ,		1.6	201							1
		228		ST OBS	000			252	364		2516	U	02813	8 (000		304							
		228		ST				251	363		2515	0	02827	2 (0.70		304 305							
		228		085				251	363		2515	0	02021	ی د	028		305							
		220		ST				252	364		2515	0	02828.	3 /	056		307							
				ST				252	364		2515		02833		1085		309							
		228		OBS	003			252	364		2516	•	02033	,	- 05		309							
				ST				252	364		2515	0	02840	6 0	142		314							
		228		OBS	005	2	22	252	364	01	2515				_		312							
				ST	D 007	5	22	252	364	0	2515	0	02851	1 (213	15	316							
		228		OBS	007	9	2 2	252	364	00	2515					15	317							
				ST	010	0	2(98	366	1	2574	0	022984	4 (1477	15	283							
		228		OBS	010	15		068	366	43	2585					15	276							
				ST				991	366		2603	0	02032	7 (331	15	258							
				ST				916	365		2621	0	01868	8 (1380	15	241							
		228		085	1015			900	365		2625						238							
				ST				350	365		2636	0	01746	8 (470		231							
		228		OBS	021			340	365		2638						230							
				ST				330	365		2640		01723		557		233							
		220		ST				312	365		2643	0	01711	6 (043		236							
		228		0BS ST	031 040			304 782	365 364		2645	0	01717	2 4	. 21 /		236							
				ST				710	363		2646 2654	-	01717: 01666°		984		243 237							
				ST				88	361		2668		015556		145		214							
		228		085	064			19	360		2676	U	01222	ز د	143		198							
		220		ST			_	888	358		2686	0	01395	7 1	292		163							
				ST				65	354		2704		012276		423		100							
		228		OBS	T086			30	353		2716	,	- 1 - 1 1				061							
				ST				949	352		2725	0	010150	0 1	536		036							
				ST			0 7	750	351		2745		00806		027		976							
		228		OBS	107	5	06	28	350		2756						940							
				ST	D 110	0	0.6	17	350	3	2757	0	00679	4]	701		940							
				ST	D 120	0	0 9	75	350	3	2763		006296		766		939							
				ST	0 130	0	0.5	32	350	3	2769	0	005798	8 1	027	14	939							
				ST	D 140	0	04	9 U	35∪	4	2774	0	005300)]	882	14	938							
				ST				+47	350	4	2779	0	00480.	3 1	933	14	938							
		228		OBS	T159	4	0.4	•07	350	40	2783					14	937							

CODE			ONGITUDE	DRJF1 INDCTR	MAR	IARE		TION TIA	۱ ا	rear.	CRUI		OTAT	ОИ	DEPTH TO BOTTOM	OEPTH OF S'MPL	089	WAVE SERVATIONS	٠	WEA- THER CODE	CLOUD		S1	NOOC TATION UMBER
2.5		1/10		-	10*			DAY HR			+	_				3 7417 [HGT PER S	TA		TYPE AM			
RC	344	2 N 0	7425 V	۱ ۱	116	44 WAT			_	966	A6				3219	31	07	5 3	-	Х6	8 8	1		0014
									SPEED.	BARC		AIR TE	MP.	V15.	NO.	SPE	CIAL							
						COLOR	IRAN!	DIR.	OR	(mbs		BULB	BU		DEPTHS	OBSER	2 NOIT AV							
								08	513	25	1	178	1.	34 7	15									
		1			_		-								1			T	Т					
MESSEN	NGR CAS	T CARO	DEPTH	(m)	r	*C	\$	*/	SIGM	A T	SPECI	MALY-XI	1ME	₹ △ 0 0YN. A X 10 ³	. SO	UNO OCITY	O 2 m1/l	PO4-P pg - a1/1		A L→P - o1/l	NO2-N µg - a1/l	NO3=N yg - at/l	\$1 O4-\$1 yg - o1/1	рН
HR 1/	/10				-		₩		ļ				_	X 103		-		,,		0.77		pg - 01/1	78 - 0	
							_ ,				١		_ 1											
		STO				282		39	250		00	2911	7	0000		311								
U	17	OBS	000			282		389	250			2010				311								
		STO				282		39	250			2913		0029		313								
_	1.79	STO				281		39	250		00	2916	3	0058		314								
Ü	17	OBS	00.			281		391	250		0.0	2017	1	000-		314								
	1.7	STE	00:			281		39	250		00	2917	1	0087		316								
U	17	OBS						399	250		0.0	2011	1	01/		318								
^	1.7	STD OBS	00!			280 278		41	250 251		u O	2911	1	0146		319								
U	17	STO				238		53	252		0.0	2719	3	0216		322								
0	17	OBS	000			039		675	259		00	2117	,	0210		268								
	11	STO				034		65	259		0.0	2104	0	0276		266								
0	17	OBS	010			8210		623	264		00	2104	U	0210	, 1,	200								
	1 /	STO				970		61	260		00	1979	Q	0327	15	253								
		STO				916		59	262			1868		0376		241								
		STO			-	834		56	264			1708		0465		226								
۵	17	OBS	T02			823		554	264		00	1,00	*	0 10.		224								
0	1,	STO				811		55	264		0.0	1677	/.	0550		228								
		510				791		53	264			1661		0633		230								
0	17	OBS	03			782		514	264		00	1001	,	005.		230								
	7 1	ST				741		44	265		0.0	1641	4	0798		231								
٥	17	OBS	04			714		395	265		00	1041	0	0190		227								
0	1	STO				612		19	266		0.0	1556	0	0958		205								
		STO				444		90	268			1427		1101		166								
٥	17	OBS	106			338		736	269		00	1721	0	110		138								
-	- '	510				239		58	269		0.0	1266	8	1242		110								
		STO				021		27	271			1106		1361		046								
0	17	OBS	081			853		097	272		- 0			•- 0		996								
		STC	-			813		09	273		00	0904	1	1461		984								
		STE				593		U5	276			0616		1537		914								
		STO				495		02	277			0515		1594		890								
0	17	OBS	T11			491		_			- 0													
	25	OBS	111			1490	35	U16	277	2					14	891								
-		STO	_			471		00	277	_	00	10509	4	1645		897								
		STO				1449		99	277			0497		1096		904								
		STO				1430	34	98	277			0489		1745		913								
		STO	15	00	0	413	34	97	277			0484		1794		923								
0	25	OBS	T16	в1	0	389	34	963	277	9					14	943								
		STO	17	50	0	386	34	96	277	9	00	0475	0	1913	14	953								
		STO	20	00	0	1373	34	97	278	1	0.0	0476	5	2032	14	990								
0	25	OBS	T 2 1	52	0	1363	34	966	278	2					15	012								
		STO	25	00	0	1340	34	95	278	3	00	0478	5	227	1.5	062								
J	25	085	27	32	Ü	315	34	949	278	5						091								
		STO	30	00	0	276	34	95	278	9	00	0418	5	2495	15	121								
0	25	085	T30	81	0	1262	34	945	279	0					15	129								

REFERENCE	1				LE M	ARSDEN	STATIO	N TIM	E		C	RIGINA	ATOR"		OEF	РТН	MAX.		WAV	E	WEA	CLOUC			NOOC]
CTRY 10.	CODE	LATITUI		LONGITUDE	10 2 L	QUARE		MT)		EAR	CRUISE		TATIO		BOTT	0	OEPTH OF	0.0	SERVATIONS		THER	COOES	_		STATION	
	+		1/10	'1/10	+ + -		-	AY HR.		-	NO.		UMBE	R	-		Z.W.P.	DiR.	нст	PER SE	1 0000	TYPE AM	T	-+	NO MOCK	-
31L061	311,061 RC 3444 N		N	07505 W			11 22 072			966	A62 015					2377 11		0.7	6 [4	4	X6	8 8	1		0015	
						WA			SPEED	BARC	·	RY TEA		VIS.	NO 08	2		CIAL								
						COLOR	TRANS.	DIR.	OR FORCE	Imbs		JLB	BUL		DEP		OBSERV	2 NOIT A								
								04 5	520	26	1 10	56	13	7 7	1	3			1							
	MESSENGE	CAST	CAR	_			T				CASCUSIC			₹ Δ o	Ή.				1	. 1					Т	
	HR 1/10 T		TYP			τ °C	s ·/		SIGMA	1-1	SPECIFIC VOLUME			M .NYO	VEFOCITA 03		02 ml/		101AL-P µg = o1/I	NO2-N	NO ₃ -N μg - α!/I	\$1 O4\$1 01/1 + QU		ó		
	111	1								İ			$^{+}$		_	_	-		+-	-					1	
1 1		1 [S.	000 ['] G1	0	2535	362	2 '	241	8 '	003	751	1 1	0000	1 :	153	70		- 1	I		Į	l	I	1	1 1
0.7		2	OB:	000	0	2535	362	21	241	8						153										
			5			2537	362		241		003	7540	0	0038	3	153	72									
	07.	2	0B			2537	362		241							153										
			S		-	2537	362		241		003			0075		153										
	0.7	_	5.			2536	362		241		003	767.	3	0113		153										
	07.	2	08:			2536 2534	362 362		241		003	77				153	_									
	07	2	0B:			2534	362		241		003	((4)	9	0188		$\frac{153}{153}$										
	07.	2	5			2533	362		241		003	783	,	0483		153										
	07.	2	0B:			2533	362		241	-	000	105.	1	, , ,		رر 153										
		_	5			2483	364		244		003	4898	8	374		153										
	07.	2	OB:			2438	365		2471							153										
			S	012	5	2283	365	1	251		002	8764	4 (0453		153										
			s.			2075	365	0	257		002	336	7	0518		152										
	072		OBS			1982	364	94	259							152	61									
			5	_		1888	364		262		001	8900) (0624		152										
	07.	2	OBS			1839	364		263					_		152										
			5			1796	364		264		0016			714		152										
	0.7	,	51			1735	364		265		0019	796	5 (795		152	13									
	07.	۷	0B3			1703 1686	364 363		266		0014	-00	, ,	106/		1 = -	1.									
	07	>	089			1673	362		265		0016	000	, ,) 4 5 4		152 152										
	V 1.	-	51			1607	360		265		0014	5637	1	1119		152										
			5			1376	356	-	267		0014			1277		151										
	07	2	08			06680		_	277		501	.,,,	•	, ,		- J 1	•0									
			5			1013	352		2710		0010	070	7	1406		150	47									
			\$	080 Q1	0	0520	349		276		000!	-		1487		146										
	07.	2	0B	T081	0	0463	349	43	276	9						148										
	0.7	2	0B3	114	10	0435	349	52	277	3																



532-AA



OW ALK